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Local use of national knowledge

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Enhancing guideline implementation in local public health policy

Theo Kuunders

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Colofon

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Local use of national knowledge

Enhancing guideline implementation in local public health policy

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General Introduction

1.1 Background

In the Public Health Status and Foresight Report, the Dutch National Institute for Public Health and the Environment (RIVM, 2014) states that chronic diseases such as mental disorders, cardiovascular disease and cancer were responsible for the highest burdens of disease in the Netherlands in 2011. Within these main disease groups, coronary heart disease caused the highest disease burden, followed by diabetes mellitus, stroke, anxiety disorders, COPD (chronic obstructive pulmonary disease), lung cancer, mood disorders, and neck and back problems. Regarding unfavorable lifestyle trends, smoking remains the major cause of death and illness by far (causing 13% of the disease burden). It is followed by overweight and insufficient physical activity. The percentage of overweight people is expected to remain high at 48%. One in three Dutch people is physically inactive and that will still be the case in 2030. The percentage of heavy drinkers will remain at 10%, as in 2012. [1]

The National Health Survey among the Dutch population goes back to 1981. Up to this day, the National Health Survey provides substantiated and integrated data on health and health related behavior every four years. From 2006, in the National Health Policy Memorandum, the Ministry of Health, Welfare and Sport (Min. of Health) has designated obesity, diabetes, depression, smoking and harmful alcohol use as the most important spearheads to be addressed by national, regional and local public health institutions. These health problems will remain high on the agenda for enhancement of (national and local) health policy and health promotion. [2]

The battle against unhealthy lifestyles, however, does not yet yield the desired results. In 2005, the Dutch Health Care Inspectorate (IGZ) report on public health care and prevention policy concluded that in the Netherlands, the quality of local health policy needed improvements, and that local authorities lacked a targeted and systematic approach of public health problems. Furthermore, the report stated that in the area of health promotion, involved professionals should develop the professional standard vigorously and Regional Health Services (RHS's) should enhance their integral quality management in order to achieve better integrated local health policies. [3]

In this context, this study intends to develop relevant building blocks for enhancing the implementation of a national guideline for municipal health policicy in RHS organizations. The guideline serves as an instrument for substantiated and systematic development of integrated health policy by municipalities, and is meant to be used by municipalities, RHS's, and public health partner organizations.

1.2 National instruments for quality enhancement of health promotion and health policy

Based on the Dutch Public Health Act (WPG), the municipal policy-making process is preferably aligned with the four-year national prevention cycle in the Netherlands. The National Institute for Public Health and Environment (RIVM) provides substantiated and integrated data on health and health determinants on a national level. The data are published in the 'Public Health Status and Forecast Report' (VTV). On this report, the Min. of Health (Public Health Directorate) bases the urgencies for national and local public health policy. These urgencies are presented in the national prevention memorandum. Subsequently, based on this national memorandum, municipalities write their own local policy memorandum, including priorities and recommendations derived from epidemiologic research of the local health situation collected by the Regional Health Services.

Next, the implementation of the process and outcomes of the national policy cycle and the local policies are evaluated and monitored by the Health Inspectorate, of which the results provide input for the new prevention cycle. During the development process the accountable departments within the Min. of Health might also be informed by working committees and a specific Board of Research, as part of the VTV. [4]

Since 2010, the Health Care Inspectorate (State of Health Care report, 2010) focuses on two of the priorities regarding public health policy. With the assistance of other inspectorates, public sector authorities and the health care sector, the Inspectorate wishes to ensure that the prevention of public health problems is made more effective at the local level, and that care for particularly vulnerable groups is improved. [5] Quality improvement of the prevention of local public health problems was the direct reason for this thesis. From 2014, the National Prevention Program ('Alles is Gezondheid', 'Everything is Health': 2014-2016) has placed more emphasis on the integrated approach to health problems. [6]

1.3 Responsibility for effective public health

At the administrative level of the Dutch public health system, the national government and the municipalities are responsible for public health policy at national and local level respectively and act as commissioners for RIVM and RHS's at the professional level. To ensure the desired effectiveness of national public health, also in future, the Min. of Health, and the Association of Dutch Municipalities (VNG) jointly implement the 'Incentive Programme for Reliable Public Health'. With the help of scientists, policy makers and practitioners, the RIVM developed a set of indicators that can provide insight into the performance of the public health system in the Netherlands as a whole, not of individual municipal public health services or municipalities. [7]

For the improvement of effective local health policy, the Ministry, the Netherlands Organization for Health Research and Development (ZonMw), RIVM, and the VNG initiated several developments to encourage a professional approach and reduce fragmentation of the so-called 'spearheads' (designated health issues) of public health. The RIVM 'Centre for Healthy Living' (Centrum voor Gezond Leven, CGL) has been established to further the exchange of knowledge available on national level and accredit effective, workable interventions. In this process of developing knowledge for local communities, the CGL works closely with the other national health knowledge institutes (e.g. The Nutrition Centre, Knowledge Centre for Sport, Trimbos Institute of Mental Health and Addiction) RHS's, and municipal professionals. With respect to advising local authorities in the main public health areas (Infectious Disease, Youth Health, Health Promotion, and Local Health Policy), the Min. of Health and the health care Inspectorate appoint a key role for RHS's in terms of the professional execution of public health tasks. [7; p.17] In their turn, RHS health departments strive to professionalize health services and provide greater support to their respective local authorities in devising and implementing integrated health policy.

1.4 Implementation of substantiated knowledge for effective local public health

Since 2006, the Dutch Ministry of Health has equipped municipalities and RHS's with national guidelines for the improvement and implementation of local health policies. Four different guidelines, incorporating statistical basis, policy advise, and recommended interventions to address smoking [8], obesity [9], alcohol abuse [10], and depression [11] were issued separately and were published sequentially within a period of two years. Although the guidelines were appreciated by the RHS's and municipalities that were familiar with them, broad and effective use did not work out. Evaluation by the National Institute for Public Health and the Environment (RIVM, 2009) showed that the separate guidelines were used to a limited extent by both municipalities and RHS's, because they lacked information about the effectiveness of the recommended interventions and examples of an integrated approach with a clear division of roles between parties in health promotion. The evaluation report suggested that guideline implementation in public health could be improved by taking process information for more integrated policy development into account and by emphasizing an integrated approach to health issues. [12] This approach includes the central premise that health policy preferably simultaneously addresses multiple determinants of health (and disease), following the basic health promotion model of Lalonde (1974). [13] 'Integrated policy' intends to focus on health of individuals interacting with their physical and social environment, which shows that several municipal sectors can contribute to the success or failure of public health goals.

1.5 Implementation of the Healthy Community Guideline

Supported by the Ministry of Health and the Health Care Inspectorate report (2010), the suggestions from the evaluation report led to an extended, more comprehensive 'Healthy Community Guideline' (Handreiking Gezonde Gemeente). [14] The initial separate guidelines were brought together, and health issues and tools for developing cross-sectoral health policies were added. The guideline further developed evidence-based knowledge and best

practices concerning lifestyle issues obesity, insufficient exercise, alcohol- and substance use, smoking, depression, and added health issues unhealthy sexual behavior, and prevention of injury. It focused more on providing local authorities with tools (e.g. checklists) for a structural integrated policy development and aimed to support both municipalities and health professionals who seek an overall quality improvement of integrated local health policy (ILHP) for their citizens. [15] The ultimate purpose of the guideline is to stimulate the use of evidence- and practice-based knowledge in the ILHP planning process.

However, effective implementation of an innovation, in this case the Healthy Community Guideline (hereafter: 'guideline'), depends not only on its intrinsic quality characteristics but also on different pragmatic and contextual factors. The improvement of the content of the guideline as a tool for integrated local health policy and health promotion does not automatically lead to increased use or effective implementation.

1.6 Implementation framework and central concepts of the thesis

Since Rogers' work *Diffusion of Innovations* (2003), the concepts 'diffusion' and 'dissemination' of innovations have become a common distinction in implementation research.

'Diffusion' refers to 'the overall spread of an innovation, the process by which an innovation is communicated through certain channels over time among the members of a social system.'

'Dissemination' refers to 'planned, systematic efforts designed to make a program or innovation more widely available.' [16] The implementation process is generally described as a set of stages by which an innovation reaches its target group and the intended behavioral change. On an individual level, these subsequent stages consist of *knowledge* (acquisition and awareness of goals and meaning of the innovation); *persuasion* (forming an attitude toward the innovation); *adoption decision* (choice to adopt or reject the innovation); *implementation* (actual use of an innovation); *confirmation* (evaluation of the results of an innovation and assurance towards continuous use).

In this thesis, the research is focused on the Regional Health Service as a network organization, in addition to the individual level of implementation. Therefore, May's definition of 'implementation' applies, which is as follows (May et. al, 2016): *Any deliberately initiated attempt to introduce new, or modify existing, patterns of action in health care or some other formal organizational setting. Deliberate initiation means that an intervention is: institutionally sanctioned; formally defined; consciously planned; and intended to lead to a changed outcome.* [17] In this definition, emphasis lies with the aspect systematic planning of actions in an implementation process.

For operationalization of our research, to access implementation barriers and facilitators, we used a framework of determinants derived from implementation theory, (MIDI-list: measurement instrument for determinants of innovations; (Fleuren, et. al, 2014)). [18] The framework was further refined by premises from Rogers' diffusion of innovations theory [16], Bandura's social cognitive theory (i.e. Self-efficacy theory) [19], management- and organization theory [20,21,22], policy theory [23,24], and by the results of interviews with key informants about local public health implementation processes (i.e. RHS professionals,

RHS managers, public health experts, municipal policy officers, and guideline developers). From this framework, five main categories of potentially relevant determinants for guideline use were derived: organization, individual user, management, the innovation, and the social political context. Details on the research framework are further described in chapters 2 and 3.

Regarding the concept of 'implementation', this thesis leaves from the viewpoint that implementation is not to be defined as a linear model of communication: the process by which messages are transferred from a certain source to targeted receivers. The diffusion of innovations is essentially a social process in which subjectively perceived information about a new idea is communicated. [16] In this case, the communication takes place in an interactive policy environment within a network of RHS organizations, municipalities, and external stakeholders.

1.7 Aim and research questions

The lack of an effective implementation strategy for the guideline that could improve the process of implementation within the daily practice of the professional working in the RHS was the direct reason for this research.

So far, insight into implementation strategies which improve integrated public health policy is scarce. Therefore, the main question for this study was: Which hindering and facilitating factors play a role in achieving an effective implementation of the guideline within the RHS? And with this information, can we develop/build a strategy that improves this implementation process?

The RHS can be regarded as both expert advisor and executor of health promoting activities at the local level. Since RHS's operate as network organizations in a political administrative context where many stakeholders are involved, the environment in which the guideline must be implemented may be called complex. Due to insufficient insight in the processes that determine an effective systematic approach for integrated health, we refer to this knowledge gap as a 'black box'. Implementation of the guideline for integrated health policy is influenced by various internal and external processes. The focus in this study is on finding promising conditions for effective implementation (use) of the guideline within the RHS organization.

This research was therefore aimed at finding building blocks for an effective implementation strategy for the guideline in the RHS organization. The purpose of the thesis was twofold:

1. Enhance insight into the 'black box' of factors and processes that affect the implementation of the guideline in RHS practice.
2. Provide an overview of building blocks for an effective implementation strategy of the guideline, with focus on the RHS as knowledge supplier and appointed advisor for integrated local health policy.

Subsequent research questions of the thesis:

1. Which factors in the health policy and executive health practice hinder or promote the adoption and use of the Healthy Community Guideline in the Regional Health Services?
2. a) To what extent do RHS professionals implement the guideline?
   b) What determinants are associated with the implementation of this guideline?
3. a) What are the characteristics of successful implementation of the Healthy Community Guideline as perceived by professionals in RHS settings and guideline developers?
   b) What are the similarities and differences in these characteristics between professionals in RHS settings and guideline developers?
4. Which (if any) of four building blocks[a] of a predefined strategy are feasible, and to what extent do they enhance implementation of the guideline for integrated local health policies into the workflow of RHS organizations?

1.8 Outline of the thesis

This thesis contains two parts:

After the introduction, part I (chapters 2 and 3) covers the theoretical background of the research framework of this thesis, the investigation of facilitating and hindering factors for implementation of the guideline, the design of a draft implementation strategy, and the validation of its building blocks.

Part II (chapters 4 and 5) describes a pilot implementation and evaluation of the draft strategy in two RHS organizations, compared to two non-pilot RHS organizations, followed by the general discussion (chapter 6).

Part I

In chapter 2, theoretical insights from implementation literature, policy theory and organizational management are presented. These insights are supplemented with facilitating and hindering factors for implementation of the guideline derived from interviews in Dutch public health practice: RHS professionals, team leaders, managers, municipal policy officers, public health partners and public health implementation experts. The results are used to determine the contours for the draft implementation strategy.

In chapter 3, we explore the generalizability of found determinants through a national web survey among all Dutch RHS's.

Part II

Chapter 4 presents the initial phase of the pilot implementation by the method of concept mapping, involving the two pilot RHS's, partner organizations, and the developers of the guideline. The results show different stakeholders' perspectives on successful implementation of the guideline.

Chapter 5 describes the evaluation of the pilot implementations through individual and group interviews in the two pilot RHS's and the comparison with two RHS's who did not use a predefined strategy for guideline use.

Finally, chapter 6 discusses the main findings of the thesis and summarizes the strengths, limitations and implications for future research, policy and practice.

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[a] Previous findings in this study led to four main phases, including actions for a draft implementation strategy.

Chapter 2

Kansen en barrières voor implementatie van de landelijke Handreiking Gezonde Gemeente in de GGD-organisatie

Theo J.M. Kuunders, Ien A.M. van de Goor,
Theo G.W.M. Paulussen, Marja J.H. van Bon-Martens en
Hans A.M. van Oers.
Kansen en barrières voor implementatie van de landelijke
Handreiking Gezonde Gemeente in de GGD-organisatie. (2015).
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Samenvatting

De Handreiking Gezonde Gemeente, een landelijk instrument voor verbetering van integraal gemeentelijk gezondheidsbeleid, wordt volgens de Gezondheidsinspectie onvoldoende gebruikt. Deze studie onderzoekt mogelijkheden voor verbeterde implementatie van de handreiking in de GGD-organisatie.

Diverse GGD-disciplines, gemeenteambtenaren en externe respondenten zijn geïnterviewd over ervaringen en opvattingen aangaande de handreiking. Naast een positieve inhoudelijke waardering is er een sterke roep om concrete vertaling naar het 'hoe' van het gebruik. De directe voordelen van het instrument voor betrokken professionals en managers binnen en buiten de GGD-en zijn onvoldoende geëxploreerd. Als GGD-en het als taak zien om het gebruik van de handreiking door professionals, gemeenten en partners te stimuleren, dan zullen zij eerst de voordelen ervan moeten expliciteren. Bereidheid bij GGD-managers om professionals te sturen en faciliteren op het gebruik van instrumenten lijkt hiervoor een belangrijke randvoorwaarde.

Chapter 2

Kansen en barrières voor implementatie van de landelijke Handreiking Gezonde Gemeente in de GGD-organisatie

2.1 Introductie

In 2005 concludeerde de Inspectie voor de Gezondheidszorg (IGZ) dat bij lokale overheden een gerichte en systematische aanpak van de volksgezondheidsproblemen ontbrak en dat de kwaliteit van de lokale openbare gezondheidszorg moest worden verbeterd. In het rapport werd gepleit voor het 'ontwikkelen van een krachtige professionele standaard' op het gebied van gezondheidsbevordering door Gemeentelijke Gezondheidsdiensten (GGD), en voor 'versterking van het integrale kwaliteitsmanagement' door GGD-directies. [1] Ter ondersteuning van de professionalisering van het gemeentelijk gezondheidsbeleid brachten de landelijke thema-instituten voor gezondheidsbevordering vanaf 2006 handleidingen (richtlijnen) uit. Daarin werd op basis van de best beschikbare kennis beschreven hoe het lokaal gezondheidsbeleid op deelterreinen meer 'evidence based' kon worden vormgegeven. De eerste handleiding betrof de 'Tabakspreventie in de nota Lokaal Gezondheidsbeleid'. [2] Daarna volgden handleidingen voor de preventie van overgewicht [3], alcohol [4] en depressie. [5]

Om het gemeentelijk gezondheidsbeleid op deze thema's te verbeteren adviseerde de IGZ in 2010 de handleidingen intensiever te gebruiken. [6] Dit advies volgde op een evaluatie van de handleidingen door het RIVM in 2009, waaruit bleek dat gemeenten de handleidingen meestal slechts gebruikten als achtergrondinformatie. Redenen die genoemd werden voor het beperkt gebruik, waren dat GGD-en en gemeenten informatie misten over de effectiviteit van de aanbevolen interventies en welke interventies elkaar konden versterken. GGD-en misten ook voorbeelden van een integrale benadering waarbij een heldere rolverdeling tussen partijen in gezondheidsbevordering is afgesproken. [7]

In 2010 kwam het RIVM aan de kritiek uit de evaluaties tegemoet met de vernieuwde 'Handreiking Gezonde Gemeente' (hierna: 'handreiking'), bestaande uit een samenvoeging van de herziene versie van de vier handleidingen, aangevuld met nieuwe thema's (Stivoro et al., 2010) en met tools voor een integrale benadering. [8] De ontwikkelaars kozen voor de verschuiving van 'handleiding' naar 'handreiking', omdat de term 'handleiding'

een 'vast recept voor gemeentelijk gezondheidsbeleid' suggereert dat aan de pluriforme praktijk onvoldoende recht zou doen. [9] Een centraal uitgangspunt in de handreiking is dat het beleid zich bij voorkeur gelijktijdig richt op meerdere determinanten van (on)gezondheid. [10] Voor dat beleid gebruikt de handreiking de term 'integraal beleid'. Dit beleid richt zich op gezondheid van het individu in wisselwerking met zijn of haar fysieke en sociale omgeving, waaruit volgt dat meerdere gemeentelijke sectoren kunnen bijdragen aan het al dan niet bereiken van publieke gezondheidsdoelen.

De handreiking is in feite de professionele standaard voor gezondheidsbevordering op lokaal niveau waarmee de GGD de kwaliteit van zijn adviestaak voor het gemeentelijk gezondheidsbeleid zou kunnen verhogen, waar de IGZ in 2005 voor gepleit heeft. De implementatie van de handreiking binnen de GGD-en verloopt echter nog moeizaam. Professionals zijn onvoldoende in staat of worden onvoldoende in staat gesteld om het huidige aanbod naar hun lokale praktijk te vertalen en hebben behoefte aan meer handvatten voor het inpassen van interventies. [11]

Uit implementatietheorie en empirisch onderzoek blijkt dat het succes en falen van de invoering van innovaties niet enkel bepaald wordt door de intrinsieke kwaliteitskenmerken van de innovatie die wordt aangeboden, maar ook door verschillende pragmatische en contextuele factoren. [12] Voorts kan verondersteld worden dat de inrichting van beleidsprocessen binnen de betreffende GGD-organisatie van invloed is op de mate waarin de handreiking bij de GGD-en geïmplementeerd wordt.

De centrale vraag voor dit onderzoek is welke factoren in de beleids- en uitvoeringspraktijk van de GGD de adoptie en het gebruik van de Handreiking Gezonde Gemeente belemmeren of bevorderen.

2.2 Methode

2.2.1 Ontwikkeling raamwerk

Voor dit onderzoek is een raamwerk ontwikkeld dat is ontleend aan recent empirisch onderzoek naar en theorieën over de diffusie van innovaties. [13] Deze diffusietheorieën zoeken vanuit de innovatie naar specifieke factoren en kenmerken die de invoering van innovaties positief dan wel negatief beïnvloeden. [14] Het genoemde empirisch onderzoek wijst op bevorderende en belemmerende factoren voor adoptie en gebruik van innovaties en onderscheidt vier categorieën van factoren. Deze categorieën van factoren hebben we voor het raamwerk met de categorie 'management' aangevuld en inhoudelijk ingevuld op basis van inzichten uit twee voor dit onderzoek relevante aanvullende wetenschapsgebieden: de beleidswetenschappen (omdat de handreiking betrekking heeft op een specifiek beleidsveld) en de organisatiekunde (omdat de GGD als netwerkorganisatie in het beleidsveld voor gezondheidsbevordering een centrale positie inneemt). Het in dit onderzoek gebruikte raamwerk is gebruikt als kader voor kwalitatieve interviews en bestaat uit de categorieën:

1. de organisatie;
2. de individuele gebruiker: kennis, attitude, vaardigheden en sociale en omgevingsfactoren;
3. het management;
4. de innovatie;
5. de sociaal-politieke omgeving.

De beleidswetenschappen interpreteren innovaties vanuit de beleidscontext, voor dit onderzoek het kader van het landelijke en lokale gezondheidsbeleid. Bij implementatie van de handreiking gaat het om lokale doorvoering van landelijk vastgestelde beleidsdoelen, waarbij de sociaal-politieke omgeving, bestuurlijke verhoudingen en verhoudingen tussen lokale en regionale organisaties als beleidscontext een belangrijke rol spelen. Voor de interpretatie van deze beleidscontext gebruiken we de 'configuratiebenadering', die in Nederland door Termeer [15] werd geïntroduceerd en gebaseerd is op de organisatietheorie van Weick. [16] Niet de organisatie als duidelijke structuur staat bij Weick centraal, maar handelende mensen die, geconfronteerd met de praktische vraagstukken van het organiseren, zin proberen te geven aan de situaties waarin zij verkeren en die zij gedeeltelijk zelf oproepen. [17, 18] Deze aanname is voor de GGD van belang. De GGD bevindt zich als gemeentelijke dienst in een lokaal en regionaal beleidsnetwerk en kan getypeerd worden als netwerkorganisatie. [19] De handreiking spreekt de GGD aan op zijn praktijkrol als initiator en ondersteuner van integraal beleid en sectoroverstijgende samenwerking tussen gemeentelijke beleidsterreinen, waaronder sectoren die niet direct gezondheidsdoelen nastreven. Om die rol te spelen moeten de GGD-professional en -manager kunnen omgaan met verschillende perspectieven en samenwerkingsprocessen kunnen faciliteren en configureren. In welke mate deze randvoorwaarden binnen de GGD ingevuld zijn, is een vraag voor dit onderzoek. Het antwoord kan verhelderend zijn voor de mate van aansluiting van de handreiking op de bestaande GGD-werkwijzen.

Een tweede aanname uit de beleidswetenschap is dat de vrijheid die professionals hebben om een vernieuwing al dan niet te gebruiken, de zogenoemde 'discretionaire ruimte' [20], een belangrijke factor is voor het succesvol implementeren van een nieuwe richtlijn. Verwacht wordt dat voor GGD-professionals in een netwerkorganisatie de discretionaire ruimte groot is, vanwege de continue afstemming op lokale verschillen en mogelijkheden van individuele gemeenten. Daarom zal bij implementatie van de handreiking gezocht moeten worden naar hun beloningsoriëntaties [13]: wat is de meerwaarde die het gebruik van de handreiking hun persoonlijk of als professional biedt, dus wat motiveert of stimuleert hen tot adoptie en gebruik van de handreiking en hoe verhouden zij zich tegenover de competenties die de handreiking veronderstelt?

De organisatiekunde biedt inzichten die wijzen op het belang van management- en beleidsprocessen in en tussen organisaties bij het invoeren van innovaties, met name daar waar verondersteld wordt dat innovatiedoelen in coalitieverband gerealiseerd worden. Uit de organisatiekunde zijn uitgangspunten van Weggeman en Mintzberg gebruikt over de rol van het management in kennisintensieve organisaties: in dit type organisaties is een goed evenwicht nodig tussen collectieve ambitie aan de ene kant en regels en procedures aan de andere. [21] Twee stellingen van Mintzberg zijn hier richtinggevend: 'Managing without an intimate understanding of what is being managed is an invitation to disharmony. External linking and dealing cannot be dissociated from internal leading and doing'. [22] De GGD

is een organisatie met hoogopgeleide kenniswerkers. Het sturen van kenniswerkers moet volgens Weggeman voortkomen uit een collectieve ambitie die aansluit bij de professionele waarden en niet uit een verticaal controlemechanisme. [23] De leidinggevende vertaalt met de professionals de ambitie naar afgeleide haalbare en uitdagende groepsdoelen. De uitdaging geldt temeer, omdat er GGD-en opereren binnen coalities van partijen die gezamenlijk hun doelen willen realiseren. Het evenwicht tussen collectieve ambitie en regels in de GGD-en wordt derhalve meegenomen in het onderzoek.

2.2.2 Onderzoeksopzet

Omdat nog weinig onderzoek is verricht naar determinanten die de implementatie van innovaties zoals de handreiking bij de GGD-en bevorderen of belemmeren, is gekozen voor een exploratieve empirische verkenning, bestaande uit kwalitatieve, semigestructureerde interviews. Voor de bepaling van de interview- topics en voor analyse van de interviewdata hebben we het ontwikkelde kader (vijf categorieën op basis van het verklaringsmodel van Paulussen et al., 2007) [24] aangevuld met de hierboven genoemde perspectieven uit de beleids- en organisatietheorie (tabel 1).

Tabel 1 Kader voor analyse bevorderende en belemmerende factoren

Kader determinanten verspreiding innovaties	Perspectieven uit beleids- en organisatiewetenschappen
Interne organisatie	• Mate van sturing op collectieve ambities/stimulering vs. beheersing • Mate van explicitering organisatiedoelen • Evenwicht interne/externe gerichtheid
Individuele gebruiker	• Kennis, competenties en leerklimaat; experimenteerruimte en informatie-uitwisseling gebruikers handreiking • Mate van beleidsvrijheid bij professionals • Mate van explicitering beloningsoriëntatie beoogd gebruiker • Teamcommitment en teamondersteuning
Betrokkenheid management	• Inhoudelijke kennis van en sturing op innovatie (type managementstijl) • Heldere verticale communicatie over ambities (integraal beleid) • Mate van explicitering beloningsoriëntatie manager • Beloning professional voor gebruik innovatie
Innovatie (Handreiking)	• Mate van procedurele helderheid en concrete toepasbaarheid op de praktijk • Mate van kwalificering innovatie als professionele standaard • Mate van afwijking handreiking van bestaande werkwijzen GGD
Omgeving, sociale/ politieke context	• Communicatie over betekenis centrale concepten innovatie (i.c. integraal beleid) • Complexiteit besluitvorming in netwerk • Beschikbare middelen • Mate van heen-en-weer denken tussen beleidsontwerp en praktische beleidsvoering • Mate van interactie over bijdrage gezondheidsdoelen aan andere partijen/gemeentelijke sectoren

Interviews zijn afgenomen bij twee GGD-en. De GGD-en werden gekozen vanwege hun onderlinge vergelijkbaarheid als regionale GGD en vanwege hun betrokkenheid bij een proefimplementatie van de handreiking. De resultaten van de interviews dienden als bouwstenen voor een implementatiestrategie. We hebben *purposive sampling* toegepast om ervoor te zorgen dat verschillende functiegroepen binnen de GGD-en vertegenwoordigd waren. [25] GGD-beleidsmedewerkers zijn bewust oververtegenwoordigd omdat zij nauw bij de ontwikkeling van de gemeentelijke gezondheidsnota betrokken zijn en geacht worden daarbij de handreiking als hulpmiddel in te zetten. Aangenomen wordt dat de adoptie van een innovatie binnen een organisatie succesvoller verloopt naarmate meer functies bij de invoering betrokken zijn. Daarom zijn binnen één GGD interviews afgenomen bij

alle relevante functieniveaus in de organisatie, zodat een samenhangend beeld binnen de gehele organisatiestructuur verkregen werd.

Daarnaast zijn van de betreffende steden- en regiogemeenten twee beleidsambtenaren volksgezondheid geïnterviewd om hun mening over de invoering van de handreiking te achterhalen. Tot slot zijn drie respondenten buiten de GGD-organisatie gekozen die vanuit een intensieve samenwerkingsrelatie met de GGD een extern gezichtspunt inbrengen over de positie van de GGD in het netwerk van gemeenten en Public Health partners: een beleidswetenschapper/Public Health expert, een trainer/consultant en een van de ontwikkelaars van de handreiking met landelijke kennis van de GGD-organisatie.

In totaal zijn veertien interviews afgenomen bij twee GGD-en, twee gemeenten en externe respondenten (tabel 2).

Tabel 2 Overzicht organisaties en respondenten

Organisatie	**Discipline**
Gemeenten (stedelijk)	• Ambtenaar Volksgezondheid (VG)
Regiogemeente (platteland)	• Ambtenaar VG
GGD-en	
GGD A	• Manager • Teamleider • Beleidsfunctionaris (3) • Directeur • GVO-functionaris
GGD B	• Manager • Beleidsfunctionaris
Niet GGD	
Universiteit	• Beleidswetenschapper Public Health expert
Management consultancy-bureau	• Trainer/consultant gemeentelijke beleidsondersteuning
Landelijke organisatie gezondheidsbevordering	• Ontwikkelaar Handreiking

2.2.3 Analyse en dataverzameling

De interviews werden in 2010 en januari 2011 afgenomen. Na een pretest is de definitieve topiclijst vastgesteld (tabel 3). De interviews zijn getranscribeerd en vervolgens gecodeerd in Atlas Ti. [26] Na codering zijn 413 unieke codes ingedeeld in 18 categorieën. Om intersubjectiviteit van het codeersysteem te bereiken is een inter-beoordelaarscontrole uitgevoerd. De hoofdonderzoeker en twee senior onderzoekers hebben onafhankelijk van elkaar vijf geanonimiseerde interviews gecodeerd. Na twee controlesessies van in totaal zes interviews werd overeenstemming bereikt over het coderingssysteem.

Tabel 3 Topiclijst interviews onderzoek implementatie Handreiking Gezonde Gemeente

Centrale vraagstelling **Hoe worden de landelijke handleidingen voor gezondheidsbevordering door de GGD gebruikt bij de ondersteuning van gemeenten en lokale uitvoeringspartners?** **Wat zijn bepalende belemmerende/bevorderende factoren bij implementatieprocessen op lokaal niveau:** **a) van de feitelijke processen binnen GGD-organisatie zelf?** **b) in de relatie tussen GGD en gemeenten en andere partijen voor gezondheidsbevordering?**
1. Wil je iets vertellen over je huidige functie? Wat vind je van de bruikbaarheid? Wat zouden zij moeten doen? Wat zijn hun mogelijkheden voor het werken met de handleidingen?
2. Ben je bekend met de landelijke handleidingen voor gezondheidsbevordering?
3. Hoe kwamen (komen) de handleidingen binnen in de organisatie (GGD/gemeente)?
4. Kun je iets vertellen over je eigen ervaringen met de handleidingen?
5. Merk je dat managers, teamleiders, collega's (wel of niet) achter het gebruik van de handleidingen staan? Hoe merk je dat?
6. Waar ligt de belangrijkste taak voor de adviseurs lokaal gezondheidsbeleid ideaal gesproken?
7. Welke faciliteiten hebben GGD-medewerkers intern nodig om het gebruik van de handleidingen te verbeteren?
8. Wat wordt er tot nu toe door de teamleiders wel/niet gedaan met de handleidingen? Waar heeft dit mee te maken?
9. Waar ligt de belangrijkste taak voor de teamleider gezondheidsbevordering ideaal gesproken? Wat zouden zij moeten doen met de handleidingen?
10. Welke faciliteiten hebben teamleiders intern nodig om het gebruik van de handleidingen te verbeteren?
11. Welke belemmeringen of kansen zie je a. in de werkwijze van de GGD-organisatie om te werken met de handleidingen? b. in de samenwerking met de gemeenten om te werken met de handleidingen? c. in de samenwerking met lokale organisaties?
12. Op welke manier zou voor jou het gebruik van de handleidingen binnen de organisatie (GGD/gemeente) iets toevoegen? En hoe schat je dit in voor anderen: a. GGD-collega in lokaal gezondheidsbeleid b. Teamleider c. Organisatie en management GGD d. Gemeenten/samenwerkingspartners

2.3 Resultaten

De categorieën waarin de bijzondere uitspraken uit de interviews konden worden ondergebracht, zijn geordend naar het raamwerk (de vijf categorieën van factoren) voor verspreiding van innovaties (tabel 4).

Tabel 4 Overzicht categorieën op basis van analyse uitspraken interviews

Ordeningskader determinanten verspreiding innovaties	Categorieën op basis van resultaten interviews
Interne organisatie	• Aansluiting bestaande werkwijze GGD op integrale benadering handreiking • Beweegredenen GGD voor wel of niet gebruik handreiking • Interne afstemming functieniveaus GGD • Randvoorwaarden in organisatie GGD voor gebruik handreiking • Kansen en bedreigingen voor integraal beleid
Individuele gebruiker	• Kennis en vaardigheden voor werken met handreiking • Coaching voor gebruik handreiking door GGD • Eigen maken betekenis handreiking voor eigen werkwijze • Werk- en tijdsdruk
Betrokkenheid management	• Visie GGD-management op ondersteuning gemeentelijk gezondheidsbeleid • Verspreiding en onderhouden kennis handreiking binnen GGD • Rol manager en teamleider bij gebruik handreiking door GGD
Innovatie (handreiking)	• Kritische factoren voor gebruik in handreiking zelf • Vertrouwen in deskundigheid en autoriteit makers handreiking
Omgeving, sociale/ politieke context	• Afstemming rollen en verantwoordelijkheden tussen GGD en gemeenten • Beweegredenen gemeente voor wel of niet gebruik handreiking • Afstemming met samenwerkingspartners lokaal gezondheidsbeleid

2.3.1 Interne organisatie GGD

Over de eigen interne GGD-organisatie en de verenigbaarheid van de handreiking met de bestaande werkwijzen doen dertien respondenten kritische uitspraken als 'achterhaalde

of ontbrekende visie in de GGD, te aanbodgerichte werkwijze en geen overzicht over de eigen dienstverlening, onvoldoende interne afstemming en rigide urenplanning' (citaat 1). Aandacht voor de handreiking is volgens een beleidsprofessional verwaterd, waardoor de betekenis voor de organisatie wordt gemist.

1. *En dat betreft ons aanbod, maar wat je daar verkoopt staat niet in relatie tot het bevorderen van een integrale aanpak want het zijn uren wat wij verkopen. Maar of die uren nou passen in het lokale gezondheidsbeleid, in die mix die gewenst is vanuit de door de gemeente gestelde doelen? Nee, het gaat er dan om dat wij in dat geval aanbieder willen zijn en eigenlijk staat het een beetje haaks op die gedachte van de handleidingen (beleidsfunctionaris GGD 1).*

Eén gezondheidsvoorlichter wijkt hiervan in positieve zin af. Zij vindt houvast in de voorbeeldteksten en interventies, maar vindt ook dat zij niet ver genoeg met aanbevelingen uit de handreiking kan meegaan, omdat er te weinig tijd voor gereserveerd is in het werkplan van de GGD.

Geïnterviewde managers in beide GGD-en spreken van een eilandcultuur, waardoor verschillende afdelingen onvoldoende weten van bestaande GGD-contacten met gemeenten of met netwerken die van belang zijn voor de ontwikkeling van sectoroverstijgend gezondheidsbeleid. Zowel respondenten uit GGD als gemeente vinden dat de kennis van de handreiking in logische samenhang met regionale beleidsondersteunende instrumenten (zoals de regionale Volksgezondheid Toekomst Verkenning) verankerd moet worden bij gemeenteambtenaren in lokaal gezondheidsbeleid.

2.3.2 Individuele gebruiker van de handreiking

Vijf respondenten denken dat 'door anderen bedachte interventies' uit de handreiking niet zonder meer passen in lokale processen van samenwerking en meedenkende burgers, wanneer mensen als onderdeel van draagvlakontwikkeling met elkaar willen bedenken welke kant ze op willen. Daarentegen noemen twee beleidsmedewerkers en de gezondheidsvoorlichter de behoefte aan concrete voorbeelden, die praktisch richting geven aan een aanpak van gezondheidsproblemen en die resultaten laten zien. Twee beleidsfunctionarissen en een gezondheidsvoorlichter vinden dat er tussen collega-professionals nauwelijks informatie wordt uitgewisseld over de beste aanpak of over de handreiking. Ook missen zij de inhoudelijke betrokkenheid vanuit teamleiders. Medewerkers en leidinggevenden weten soms niet dat de handreiking bestaat en waar die voor bedoeld is. Professionals bepalen grotendeels zelf of zij intern vastgestelde werkinstructies gebruiken. Daarnaast geven twee van hen aan dat ze er vaak alleen voor staan bij het uitwerken van preventieplannen. Daardoor is voor hen niet altijd duidelijk of ze op de goede weg zijn.

De managers van beide GGD-en en de beleidswetenschapper denken dat er aanvullende competenties nodig zijn om professionals beter te leren aansluiten bij referentiekaders van gemeenten en andere zorgaanbieders. Zij noemen bijvoorbeeld vaardigheden van 'procesmanagement'. Een beleidsfunctionaris verwacht dat coaching door teamleiders een passend antwoord kan bieden op de vraag hoe je professionals kunt aansturen via de handreiking, omdat daarin nieuwe vaardigheden gevraagd worden. Voor een dialoog met die omgeving wordt de specifieke competentie genoemd van evenwicht bewaren tussen je professioneel onafhankelijk oordeel als GGD en je laten leiden door belangen van de bestuurlijke omgeving (citaat 2).

2. *Maar dat is natuurlijk ook iets van hoe kijk je naar het gezondheidskundig model, en hoe relevant is de inbreng vanuit de omgeving voor het verder genereren van informatie die je gezondheidskundig ook kunt gebruiken. Dus op het moment dat je zeg maar informatie vanuit die bestuurlijke wereld alleen maar ziet als 'dat hebben we nou eenmaal nodig om die gezondheidskundige boodschap te laten landen', dan heb je het een stukje moeilijker om je boodschap te verkopen dan wanneer je de betrokkenheid van die bestuurlijke omgeving ook ziet als input voor waar je mee bezig bent (beleidswetenschapper).*

Een teamleider vindt de toegevoegde waarde van de handreiking niet duidelijk en het gebruik wordt niet gestimuleerd. Een werkwijze die als bevorderend voor gebruik wordt gezien, is het doornemen van de handreiking met collega's van GGD en gemeente om passende mogelijkheden voor gebruik en voor het uitproberen van andere werkwijzen op het spoor te komen.

2.3.3 Betrokkenheid management

Een GGD-beleidsmedewerker, beleidswetenschapper, GGD-manager en -teamleider noemen het gemis aan aansturing vanuit een gedeelde visie tussen management, middenkader en beleidsuitvoering over de koers van de GGD-organisatie bij integraal gezondheidsbeleid. Zij willen daar concrete beleidsadviezen aan gemeenten van af kunnen leiden. Deze inhoudelijke aansturing ontbreekt volgens de respondenten in beide GGD-en. Twee beleidsfunctionarissen en een teamleider stellen dat de visie op gemeentelijke regievoering en integraal beleid op lokaal niveau zou moeten voortkomen uit een integrale management- en organisatiestrategie van de GGD (citaat 3). Managers denken verschillend over hun rol als het gaat om aansturing vanuit aanbevelingen in de handreiking. De ene manager beschouwt toetsing van het gebruik van de handreiking als taak van het management, een andere laat het gebruik tot het terrein van de professional.

3. *Kijk die handleiding die moet je ook verbinden aan de strategie van de GGD. Dus dan is het ook nodig dat op dat meer bestuurlijke niveau van de GGD het ook daar een plek heeft, dus dat daar ook de verbinding gelegd wordt naar de omgeving (beleidswetenschapper).*

2.3.4 De innovatie (de handreiking)

De handreiking voorziet volgens respondenten vooral in 'wat' gedaan moet worden. Een concrete aanpak voor beleidsadvisering en -uitvoering, het 'hoe', is in de handreiking echter nog onvoldoende uitgewerkt. Er wordt een kanttekening geplaatst bij 'evidence based werken' (citaat 4). Een manager en beleidsfunctionaris noemen gebrek aan vertrouwen in het concept 'effectieve interventies', dat volgens hen ook onder collega's bestaat.

4. *Ons hangt toch ook een beetje aan dat wij denken dat alles... beïnvloedbaar is... wij geloven nog een beetje in die maakbaarheid van de samenleving, dat die ook maar zeer beperkt is. Want wij zitten in onze eigen val te lopen door die schijn op te wekken dat wij met het vingertje weten wat goed is voor de mens, en tegelijkertijd hebben we er betrekkelijk weinig invloed op... wat ik heel opvallend vind is dat in de gezondheidswereld wordt toch veel meer over evidence-based gesproken en als je dat op de keper beschouwt kom je daar ook niet zo ver mee. Ja wel een beetje, maar toch ook betrekkelijk gering (manager GGD).*

2.3.5 Omgeving, sociale en politieke context

Drie GGD-beleidsfunctionarissen merken in contacten met gemeenteambtenaren dat de handreiking niet of onvoldoende bij gemeenten bekend is of wordt gebruikt. Gemeenten komen soms niet tegemoet aan de Inspectie-eisen voor gebruik van meer effectieve interventies, vanwege hun beperkte lokale financiële middelen. De gemeenteambtenaar ervaart de handreiking als een extra last waaraan hij geen tijd wil besteden, omdat er al een weg is ingeslagen (citaat 5). Volgens de stedelijke ambtenaar staan de middelen voor gezondheidspreventie onder druk binnen de gemeentelijke politieke context, wanneer een incident veel aandacht vraagt. Dit kan een onevenredig groot deel van het budget vergen (citaat 6). Volgens een manager leidt een te sterke focus op de gezondheidsmissie van de GGD ertoe dat andersoortige doelen van gemeenten ondergeschikt raken en groeit de GGD als publieke dienst onvoldoende mee met een veranderende samenleving. Dit is een belemmering voor een integrale benadering zoals in de handreiking wordt voorgesteld.

Drie respondenten vinden dat er meer aandacht nodig is voor de directe relaties in een politiek-bestuurlijke omgeving, om elkaar beter te kennen en om externe belangen in het eigen beleidsproces van de GGD te betrekken.

5. *We zijn eigenlijk aan het voortbouwen gegaan op de lijn die we al jaren geleden ingezet hebben en die is eigenlijk toch van prachtig dat er een landelijke richtlijn is, maar wij kijken toch echt heel erg sterk naar als er flink geld bijkomt om dat allemaal te regelen vind ik het prima, maar als dat niet zo is bepalen we toch wat voor onze gemeente het beste is (beleidsambtenaar Volksgezondheid regiogemeente).*

6. *Die hostelperikelen hebben dusdanig hoog op de politieke agenda gestaan, omdat de burgers dus heel boos waren dat die hostels in woonwijken worden gevestigd met drugsopvang, dus daarmee wordt het heel concreet. En als het politiek belangrijk is dan wordt het hier ook belangrijk binnen onze gemeente eh als je ziet wat wij daar aan ambtelijke inzet daar hebben moeten plegen op dat ene onderwerp dan denk je van ja... begrijp je hoe het dan werkt zeg maar, dan werkt het niet meer rationeel... (beleidsambtenaar Volksgezondheid stadsgemeente).*

2.4 Discussie

De centrale vraag in het onderzoek was welke factoren in de beleidspraktijk van de GGD-organisatie de adoptie en het gebruik van de Handreiking Gezonde Gemeente belemmeren of bevorderen bij de ondersteuning van het gemeentelijk gezondheidsbeleid. Voor de inventarisatie van die factoren lag het accent op de interne GGD-organisatie, omdat de GGD als gemeentelijke dienst een directe ondersteunings- en adviesrelatie heeft met beleidsafdelingen volksgezondheid van de gemeenten. Daarbij is binnen de GGD gezocht naar individuele perspectieven en taakopvattingen, relevante organisatorische randvoorwaarden en de relaties met gemeenten bij adoptie en gebruik van de handreiking. Respondenten in beide GGD-en merken op dat de aandacht voor de handreiking beperkt is. Voor professionals en management zijn de voordelen van het gebruik onvoldoende verkend, omdat de vertaling naar concrete toepassing van de handreiking niet heeft plaatsgevonden. De vijf clusters van determinanten voor adoptie en gebruik van innovaties uit het raamwerk van Paulussen et al. (2012) dienen als kader voor bespreking van de resultaten. [13]

2.4.1 Factoren gerelateerd aan de interne organisatie

Vrijwel alle respondenten uit de twee GGD-en bevestigen dat er sprake is van onvoldoende aansluiting van de handreiking bij de bestaande werkwijze van hun organisatie. Zij vinden dat de GGD zijn visie en werkwijze meer zou moeten afstemmen op wat er onder burgers en politici leeft aan concrete problemen en wensen. Het ontwikkelen van sectoroverstijgend gezondheidsbeleid wordt bemoeilijkt omdat binnen de onderzochte GGD-en een eilandcultuur heerst. Aansturing van professionals vanuit gezamenlijke ambities en de vertaling naar concrete uitvoeringsafspraken is niet de expliciete managementstijl. Voor netwerkorganisaties in het publieke domein geldt echter in het algemeen dat zij voor het realiseren van hun eigen doelen externe partners nodig hebben. [19] Hieruit volgt dat profilering van een herkenbare ambitie noodzakelijk is voor een gerichte bijdrage van externe partners aan deze doelen. Een innovatie kan deze profilering dienen via kritische reflectie op bestaande doelen.

2.4.2 Factoren gerelateerd aan de individuele gebruiker

De verspreiding van kennis over de handreiking blijkt bij de betrokken GGD-en onvoldoende geborgd. Respondenten geven aan dat het verbinden van de handreiking met de eigen bestaande instrumenten het gebruik kan bevorderen, wat nu onvoldoende het geval is. De bereidheid bij de GGD-professionals tot gebruik van de handreiking lijkt samen te hangen met een heldere aansturing over gewenste doelen voor gemeentelijk gezondheidsbeleid.

Bij onderzoek naar planningsgedrag van individuele gebruikers van innovaties wordt een onderscheid gemaakt tussen de factoren kennis, attitude, vaardigheden en sociale invloeden. [27] Een weliswaar noodzakelijke, maar doorgaans onvoldoende voorwaarde voor gebruik is kennis en begrip van wat de vernieuwing van de gebruiker vraagt.

De vrije ruimte die respondenten ervaren voor het gebruik van specifieke instrumenten, is aanzienlijk. Het valt op dat vooral managers aangeven dat voor een andere werkwijze specifieke competenties aangevuld moeten worden op het niveau van beleidsadvisering, terwijl door respondenten in beleidsfuncties en uitvoering geen ontbrekende competenties worden genoemd. Hier kan sprake zijn van een voorbehoud om eigen tekorten toe te geven of van onduidelijkheid over op te volgen werkwijzen van de handreiking en gevraagde competenties. Beleidsmedewerkers missen op hun beurt betrokkenheid en een heldere aansturing en facilitering op basis van inhoudelijke visie, ambities en doelstellingen vanuit het management. De instrumentaliteit (intrinsieke kwaliteitskenmerken zoals mate van compatibiliteit met bestaande werkwijzen en competenties) van de vernieuwing en taakopvatting van beoogde gebruikers zijn belangrijke determinanten die al vroeg in de adoptiefase geadresseerd moeten worden.

2.4.3 Factoren gerelateerd aan betrokkenheid management

In dit onderzoek bleek de aan de handreiking gerelateerde taakopvatting tussen de geïnterviewde managers te verschillen. Inhoudelijke betrokkenheid bij de uitvoering van beleidstaken en daaruit voortvloeiende aansturing van professionals wordt door de ene manager wel en door de andere niet als taak of verantwoordelijkheid opgevat.

Uit veel onderzoek komt naar voren dat betrokkenheid van het management een kritische factor is voor het succes of falen van een innovatie. [28]

Mintzberg en Weggeman beschrijven hoe het formuleren van collectieve ambities in teamverband bevorderend kan zijn voor commitment aan een nieuwe werkwijze op aansturend en uitvoerend niveau en dat dit als bevorderend voor implementatie van werkwijzen

kan worden beschouwd. [21; p.17-18] Dit onderstreept het belang van een specifieke determinant voor implementatie van een vernieuwing: het in kaart brengen van beloningsoriëntaties van beoogde gebruikers op verschillende niveaus van de organisatie ondersteunt de adoptie van een vernieuwing.

2.4.4 Factoren gerelateerd aan de innovatie

Bij de handreiking als instrument wordt het belang van 'evidence' expliciet door meer respondenten op verschillende functieniveaus gerelativeerd. Uit onderzoek naar innovaties is genoegzaam bekend dat beoogde gebruikersgroepen slechts in geringe mate worden gedreven door effectiviteit-overwegingen, zeker bij aanvang van een proces van innovatie. Eerst en vooral willen zij zich een beeld vormen van wat de vernieuwing voor henzelf betekent. [24] Innovaties gaan haast per definitie gepaard met gevoelens van onzekerheid. Van daaruit is het begrijpelijk dat bij de fase van initieel gebruik van een vernieuwing bij gebruikers behoefte bestaat aan concrete voorbeelden, die houvast bieden en direct iets opleveren voor de dagelijkse praktijk. De mate waarin een vernieuwing houvast biedt en procedurele helderheid biedt, is een belangrijk aandachtspunt voor de fase van initieel gebruik. Ook het antwoord op de vraag: 'Wat levert het mij op?' weegt daarbij zwaarder dan de status van 'evidence' of 'effectiviteit', zoals ook uit dit onderzoek naar voren kwam. De directe opbrengsten kunnen daarentegen tussen de diverse functieniveaus (uitvoering, beleid en management) verschillen. Op uitvoerend niveau is concreet houvast bij interventies prettig als de vraag is: 'Kan ik het wel?' De beleidsfunctionaris wil graag dat het instrument voor de beleidsontwikkeling richting geeft voor de te zetten stappen in het beleidsnetwerk, bij de gemeenteambtenaar tot enthousiasme leidt en partners committeert. Voor de gemeentelijk manager is bijvoorbeeld van belang hoeveel burgers er zichtbaar mee bereikt worden, en de bestuurlijk verantwoordelijke ziet graag maatschappelijke betrokkenheid en politieke stabiliteit.

De ogenschijnlijk tegengestelde uitspraken over de concrete toepasbaarheid van de handreiking (het 'hoe' dat nog onvoldoende is uitgewerkt) en de roep om ruimte voor lokale aanpassing van de werkwijzen wijzen op een ambivalente houding bij GGD-en als het gaat om verwachtingen ten aanzien van het 'hapklare brokken-gehalte' van de handreiking. Deze tegenstelling is wellicht te verklaren uit de verschillende ideeën over de toepassing. Naarmate het netwerk van actoren complexer wordt, zal er meer afstemming nodig zijn over gewenste doelen en werkwijzen en zullen vooraf gedicteerde werkinstructies op meer weerstand stuiten. In de innovatietheorie worden een klein aantal gecommitteerde betrokkenen en korte beslislijnen gezien als bevorderende factoren voor het in gang zetten van een vernieuwing. [29] Weerstanden tegen veranderende werkwijzen worden dan beter hanteerbaar. Aan de andere kant geven geïnterviewde beleidsprofessionals aan hoe prettig het zou zijn als de handreiking concrete stappen aanreikt voor beleidsontwikkeling en -advisering. De onzekerheid over en het zoeken naar de juiste weg voor het gemeentelijk gezondheidsbeleid uit zich in de gesprekken op alle functieniveaus. De handreiking wordt door zowel de makers als respondenten gezien als 'ontwikkelinstrument'. De verzamelde informatie en aanbevelingen voor beleidsontwikkeling worden in het veld positief gewaardeerd. Het is echter geen afgerond en gebruiksklaar geheel, wat het lastig maakt de handreiking concreet toe te passen in de praktijk. De procedurele helderheid als algemene theoretische voorwaarde voor succesvolle implementatie blijkt hier niet toereikend en vormt een belemmerende factor van de innovatie.

2.4.5 Factoren gerelateerd aan de sociale en politieke context

De sociale en politieke context waarin de handreiking moet 'landen' mag complex genoemd worden, vanwege de betrokkenheid van een groot aantal organisaties bij publieke gezondheid. Gemeenteambtenaren volksgezondheid geven aan dat de middelen om gezondheidsthema's breder onder de aandacht te brengen beperkt zijn. De aandacht voor de handreiking bij de in het onderzoek betrokken gemeenten is gering. De actualiteit en urgentie van lokale maatschappelijke vraagstukken maken het voor gemeenten lastiger om vanuit gezondheidskaders (de handreiking) beleid te ontwikkelen. Hieruit volgt het belang van de ruimte voor heen-en-weer denken tussen beleidsontwerp (de innovatie) en praktische beleidsvoering, waarbij een politieke context evenzeer dient als input voor de eigen organisatiedoelen. 'Interactief ontwerpen van beleid' biedt een basis voor implementatie van innovaties in een netwerkorganisatie.

2.5 Beperkingen in het onderzoek

De kwalitatieve resultaten uit de interviews over belemmerende en bevorderende factoren voor implementatie van de handreiking geven opvattingen weer uit een groep respondenten in diverse functies van twee GGD-en, externe partijen en van enkele gemeenten. De herkenbaarheid van resultaten voor andere GGD-en is hierdoor mogelijk beperkt. Om aan deze beperking tegemoet te komen is een theoretisch kader gebruikt om het risico van bias in de resultaten te verkleinen. Voor zover de resultaten en aanbevelingen uit de diepte-interviews aansluiten bij dit theoretisch kader, duiden zij mogelijk op generieke factoren voor het werken met de handreiking, die generaliseerbaar zijn voor implementatie in andere GGD-organisaties. Specifieke kenmerken van de onderzochte regionale GGD-organisaties en de beschreven belemmerende en bevorderende factoren voor implementatie kunnen het proces van professionalisering van de gemeentelijke beleidsadvisering binnen andere GGD-en ondersteunen.

2.6 Conclusies en aanbevelingen

In de interviews zijn zeer diverse belemmerende en bevorderende factoren voor implementatie van de handreiking in de GGD genoemd. In antwoord op de centrale vraagstelling van dit onderzoek worden hier de meest opvallende factoren besproken.

Een belemmering voor de integratie van de handreiking in het dagelijks werk van GGD-functionarissen is dat de directe voordelen van het gebruik voor zowel GGD-en als partners nog onvoldoende in beeld zijn gebracht als gevolg van gebrekkige interne verspreiding van kennis over het instrument en het ontbreken van een gedeelde ambitie waarbij de handreiking ondersteunend kan zijn. Ondanks de algemeen positieve waardering door de praktijk voor de compleetheid en visie van de handreiking, zien professionals graag meer concrete vertaling naar het 'hoe' voor het gebruik ervan in de lokale context. De GGD zou deze vertaling (intern en extern) als haar taak kunnen opvatten, maar deze wordt in de bevraagde GGD-en onvoldoende opgepakt. Hierdoor wordt niet alleen binnen de GGD, maar ook bij de gemeenten de systematiek van de in de handreiking aanbevolen werkwijzen gemist, evenals de vraag welke competenties mogelijk gemist worden. [30]

Interne afstemming over de inhoud van de handreiking op managementniveau wordt door respondenten op uitvoerend niveau gezien als stimulerend voor het gebruik en geldt als aanbeveling voor effectieve implementatie.

De rollen van het management, de teamleiders en professionals in het adoptieproces hangen nauw met elkaar samen. Managers gebruiken de 'autonomie van de kenniswerker' (de professional weet het beste of dient het te weten) als argument om weg te blijven van inhoudelijke aansturing en willen het gebruik van de handreiking niet 'opleggen' aan hun professionals. Als absoluut managementstandpunt is dit een belemmerende factor voor implementatie. Een ambivalente professional ('graag concrete handvatten, maar geen keurslijf') is met dit managementstandpunt niet geholpen. Managers nemen nog geen besluit over de status van de handreiking als 'professionele standaard'. Om de status van de handreiking te achterhalen lijkt het verstandig expliciet te maken of en hoe het instrument de actuele beleidsdoelen van de GGD kan ondersteunen of mogelijk kan bijstellen of aanvullen.

Als de GGD het als taak ziet om het gebruik van de handreiking door GGD, gemeente en partners te stimuleren, dan is aan te bevelen dat GGD-professionals en -managers de beloningsoriëntaties (directe voordelen van het gebruik) voor zowel zichzelf als voor de externe partners achterhalen.

Belemmerend voor gebruik van de handreiking is daarnaast dat korte lijnen voor instructie en beloning vanuit managementkaders en voor coaching tussen leidinggevenden en uitvoerders onvoldoende gewaarborgd lijken. Een bevorderende factor voor implementatie is, wanneer de GGD haar organisatiedoelen voor ondersteuning van het integraal gezondheidsbeleid als gezamenlijke richtinggevende doelen kan benoemen, waaraan managers en professionals zich concreet kunnen verbinden.

Het formuleren van een collectieve ambitie kan de teamgeest versterken door duidelijkheid over de doelen en over een gezamenlijke werkwijze en kan het commitment van managers en professionals vergroten. Een voorwaarde is hier dat het management zich ook door inhoudelijke kaders wil laten leiden en coaching en intervisie voor professionals ondersteunt.

Bij het vaststellen van ambities en doelen kan ook worden achterhaald of er nog specifieke competenties voor het gebruik (zoals bedoeld) van de handreiking worden gemist. De aanpassingen in werkwijzen en competenties die gevraagd worden voor het gebruik, lijken betrekking te hebben op alle niveaus van de GGD-organisatie.

Bij de vraag naar welke organisatorische randvoorwaarden binnen de GGD een rol spelen bij de adoptie en het gebruik van de handreiking, komen factoren als 'versnippering van uren' en 'onvoldoende afstemming met externe partners' als belemmerend naar voren.

Het veranderen van bestaande werkwijzen naar werkwijzen conform de handreiking kan op kleine schaal worden ingezet, voordat veranderingen breder in de organisatie worden doorgevoerd. Op die manier kunnen de voor- en nadelen van integratie van de handreiking met de eigen voorkeursinstrumenten zichtbaar worden.

Ten slotte kunnen we concluderen dat de GGD-werkwijze beter zou aansluiten bij thema's als 'integrale beleidsontwikkeling' en 'intersectorale samenwerking' in de handreiking, wanneer GGD-professionals meer investeren in het achterhalen hoe gezondheidsdoelen kunnen bijdragen aan de doelen van andere sectoren of samenwerkingspartners. Daarvoor moeten zij andere sectoren (mensen) beter leren kennen. Voor die investering zien medewerkers nu nog onvoldoende ruimte in de GGD.

GGD-en doen er goed aan de dialoog met andere beleidssectoren te versterken, zowel op professioneel en ambtelijk niveau als op wijkniveau met burgers, om gemeenten te enthousiasmeren voor integraal gezondheidsbeleid en voor een sterkere verbinding van publieke gezondheidsdoelen (Wet publieke gezondheid) met de Wet Maatschappelijke Ondersteuning.

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Chapter 3

Implementation of a guideline for local health policy making by Regional Health Services: exploring determinants of use by a web survey

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Abstract

Background: Previous evaluation showed insufficient use of a national guideline for integrated local health policy by Regional Health Services (RHS) in the Netherlands. The guideline focuses on five health topics and includes five checklists to support integrated municipal health policies. This study explores the determinants of guideline use by regional Dutch health professionals.

Methods: A web survey was sent to 304 RHS health professionals. The questionnaire was based on a theory- and research-based framework of determinants of public health innovations. Main outcomes were guideline use and completeness of use, defined as the number of health topics and checklists used. Associations between determinants and (completeness of) guideline use were explored by multivariate regression models.

Results: The survey was started by 120 professionals (39%). Finally, results from 73 respondents (24%) were eligible for analyses. All 28 Dutch RHS organizations were represented in the final dataset. About half of the respondents (48%) used the guideline. The average score for completeness of use (potential range 1-10) was 2.37 (sd = 1.78; range 1-7). Knowledge, perceived task responsibility and usability were significantly related to guideline use in univariate analyses. Only usability remained significant in the multivariate model on guideline use. Only self-efficacy accounted for significant proportions of variance in completeness of use.

Conclusions: The results imply that strategies to improve guideline use by RHS's should primarily target perceived usability. Self-efficacy appeared the primary target for improving completeness of guideline use. Methods for targeting these determinants in RHS's are discussed.

Keywords: local health policy, Regional Health Service, guideline use, web based survey, implementation determinants, implementation strategy, the Netherlands.

Chapter 3

Implementation of a guideline for local health policy making by Regional Health Services: exploring determinants of use by a web survey

3.1 Background

The development and implementation of public health policies in the Netherlands is largely delegated to local authorities. In this process, municipalities are supported by Regional Health Services (RHS's). RHS's focus on three main prevention areas of Infectious Disease, Youth Health, and (lifestyle related) Health Promotion. Typical RHS's professions are doctors, nurses, health promoters, health scientists, policy officers, and epidemiologists. Their work consists of directly client-oriented activities (e.g. information on sexually transmitted diseases; intervention for obesity prevention, health education in schools), advisory for policy development and of collecting statistical information (monitoring of regional – and local trends in health and disease) to provide input for regional – and local policy advice. RHS's can either have a regional scope and serve multiple municipalities or serve a single (urban) municipality.

Since 2006, the Dutch Ministry of Health has equipped municipalities and RHS's with national guidelines for the planning and implementation of their public health policies. [1] Four different guidelines, incorporating recommended interventions to address smoking [2], obesity [3], alcohol abuse [4], and depression [5] were issued separately and were published sequentially within a period of two years. Preliminary evaluation indicated unsatisfactory results concerning the guidelines' implementation and led to a revised, more extended and comprehensive guideline for local health policy: 'Healthy Community Guideline' (hereafter 'guideline'). [6] The new guideline integrated the four separate guidelines, and added the topic 'sexual health', and new tools (checklists) for developing cross-sectoral public health policies. The overall purpose of the guideline is to stimulate the use of evidence in this planning process. [7] The guideline's health topics and checklists serve different, though related purposes. The health topics are about selection and application of exemplary interventions, while the checklists provide leads for improving collaboration and commitment among those participating in the planning of local health policies. RHS policy officers are called upon to use the checklists containing leads for health policy planning, and evaluation. They may also use practical examples of support-based collaboration between municipal departments and partner organizations, which describe do's and don'ts

for reaching commitment and shared priority setting among public health parties. The guideline supports health promoters with evidence-based interventions for (e.g.) obesity and depression, and offers formats for setting up regional programs for specific health risks, such as the prevention of alcohol abuse. Successful implementation of the guideline can be defined as 'improved local collaboration in projects and programs for integrated health' (e.g. environmental planning and stimulating physical exercise). In addition, the target population will be better reached by interventions based on evidence. The guideline offers RHS organizations new methods that challenge their professionals to practice specific (partly new) competencies and skills.

This research aims to answer two questions:
1. To what extent do RHS professionals implement the guideline?
2. What determinants are associated with the implementation of this guideline?

3.1.1 Exploring determinants of guideline implementation in local health policy

This study wants to gain leads for improving local public health policies that fit within the structures and workflow of local health organizations and their cross sectoral networks. [8] International research provides an extensive range of knowledge when it comes to barriers and facilitators for the implementation of clinical guidelines. Determinants have been found such as professionals' views and beliefs [9], outcome expectancies of an innovation [10], knowledge and attitudes towards change of practice [11; p.16], self-efficacy beliefs [12], and social- and organizational support. [13] Less has been written about the determinants for guideline implementation within the political-administrative context of public health. [14,15]

Clinical guidelines often target rather homogeneous professional groups (e.g. doctors, paramedics) which is different from the implementation of guidelines for local health policy by a network of organizations. Besides, clinical guidelines predominantly prescribe a step-by-step treatment of a patients' specific disorder with a specified outcome. The adoption process usually takes place in a hierarchical organizational context that often leaves little or no room for personal interpretation and flexibility. In contrast, the implementation of policy guidelines for local health needs to build coalitions among various organizations, each having their own interests, priorities and perceptions about the means by which public health goals are best achieved. Compared to a clinical setting, the process of adoption of policy guidelines in public health requires more negotiations among network partners for reaching consensus about shared goals and their investment for reaching these goals. [16] As such, cross-sectoral collaboration in public health policy making requires a more horizontal basis with input from the participants' calculations of their own costs-benefit ratio. [17, 18]

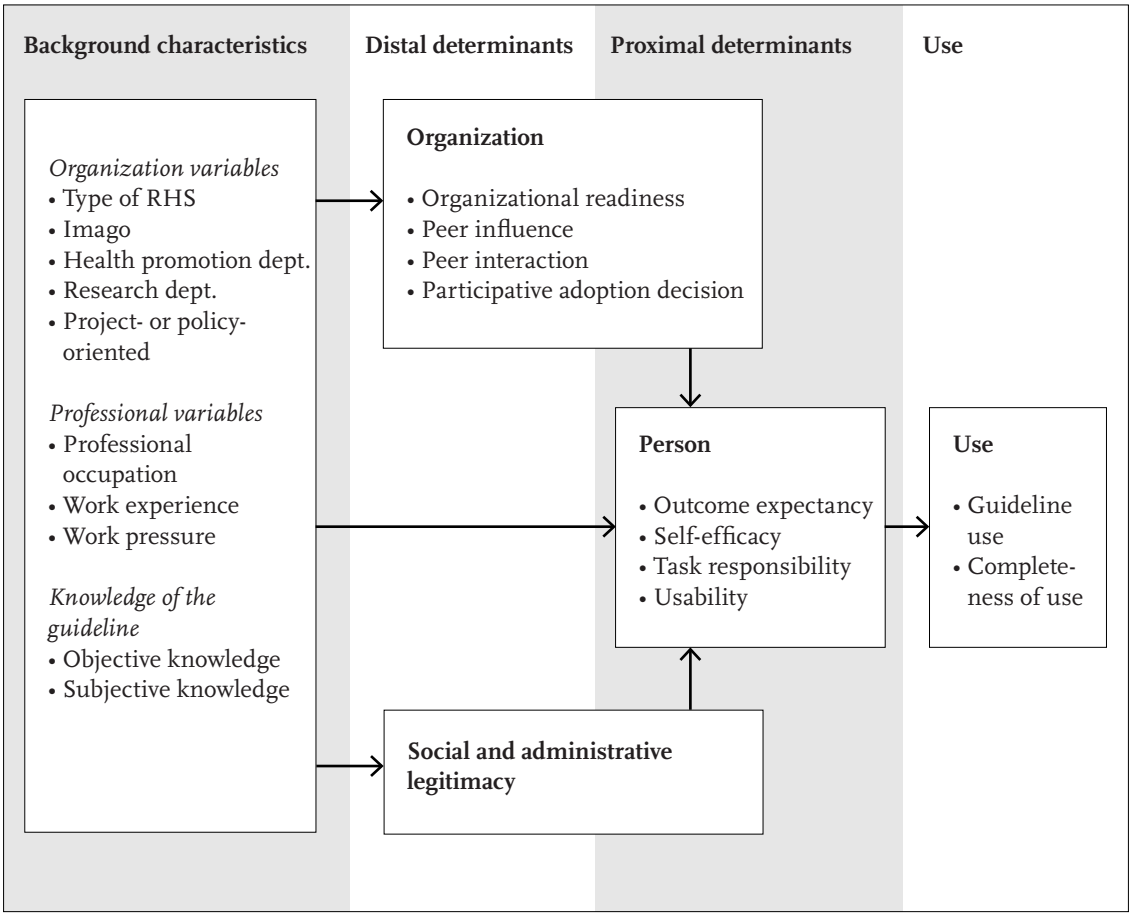
Overall, the implementation literature since Matland (1995) [19] has come to a consensus about the need for combining both top-down and bottom-up strategies in order to account for the local conditions for guideline implementation, such as available resources, specific interests of coalitions, partners, activities already implemented and the distribution of power. [15]

3.1.2 Theoretical framework

This research focuses on the guideline's implementation by RHS policy advisors and health promoters. In order to assess implementation barriers and facilitators, we constructed a

research framework of potentially relevant determinants of guideline use. The theory- and research- based framework MIDI (Measurement Instrument for Determinants of Innovations) was used as a point of reference for the framework for this study. [11, 20] MIDI offers an overview of potentially relevant determinants of public health innovations and leads for assessment. The framework for this study consisted of proximal determinants (e.g. task responsibility), which are expected to impact guideline use directly. The selected, distal determinants (e.g. years of working experience) are expected to be mediated by the proximal factors. The research framework was further refined by premises from Rogers' diffusion of innovations theory [13], Bandura's social cognitive theory (i.e. Self-efficacy theory) [12, 21], policy theory [22, 23, 24], organization theory [25, 26], and by the results of a recent Dutch study among key informants about local public health implementation processes (i.e. RHS professionals, RHS managers, public health experts, municipal policy officers, and guideline developers). [27] The framework applied in this study is presented in Fig. 1.

Figure 1 Research framework of determinants of guideline use



3.2 Methods

3.2.1 Composition and check of internal consistency of determinants

Determinants, as described in the research framework, were assessed by one or more questionnaire items. They were assessed as either dichotomous, continuous, counts, or by Likert-type scaled items. Composite scores were computed when acceptable levels of internal consistency (Cronbach's alpha ≥0.60) were reached. Composite scores were computed by dividing the sum score by the number of items. Negatively formulated items were flipped first, whenever necessary. Table 1 provides an overview of the Alpha scores.

3.2.2 Outcome measures: Use and completeness

'Guideline use' was defined as whether or not the respondent used any of the health topics and/or checklists. 'Completeness of use' was defined as the number of the health topics (range 1-5) and/or checklists (range 1-5) included in the guideline, that were put into practice. Because 'guideline use', and 'completeness of use' are quite distinct phenomena, it was expected that they could be affected by different factors.

3.2.3 Proximal determinants

'Outcome expectancy' was assessed as the product of perceived importance and feasibility of the guidelines' key objectives. We used 14 5-point Likert scaled items. 'Self-efficacy' was assessed by two five-point scaled items. 'Task responsibility' contained three items, such as 'The guideline contains activities that fit my job within the RHS'. For all Likert scaled items, response options ranged from 1 = strongly agree to 5 = strongly disagree. We used 19 items to assess 'usability'.

Table 1 Number of items and internal consistency of the determinants

Determinants	Potential score	Number of items	Cronbach's alpha
Person			
Outcome expectancy	1 (low) - 5 (high)	14	0.90
Self-efficacy (A)	1 (low) - 5 (high)	1	
Self-efficacy (B)	1 (low) - 5 (high)	1	
Task responsibility	1 (low) - 5 (high)	3	0.70
Usability of guideline	1 (low) - 5 (high)	19	0.89
Organization			
Encouragement of guideline use	1 (low) - 5 (high)	3	0.73
Organizational readiness	1 (low) - 5 (high)	6	0.61
Peer influence (peer support to use the guideline)	1 (low) - 5 (high)	4	0.68
Peer interaction (amount of meeting types in which guideline is addressed)	0 - 8	8	0.68
Participative adoption decision	yes vs no	2	1.0
Social and administrative legitimacy			
Legitimacy of the guideline	1 (low) - 5 (high)	9	0.63
Background variables			
Organization type	urban vs regional RHS	1	
Health promotion dept.	within RHS vs not within RHS	1	
Research dept	within RHS vs not within RHS	1	
Imago of RHS	1-5 (positive imago)	2	0.74
RHS orientation	1 (project oriented) - 5 (policy oriented)	1	
Professional occupation	health promoter vs policy advisor	1	
Work experience	number of years	1	
Work pressure	1 (too low) - 5 (too high)	1	
Knowledge of guideline		7	0.65
• Subjectively	0-2 (knowledge of availability and concept)	2	0.60
• Objectively	0-5 (knowledge of content)	5	0.80

3.2.4 Distal determinants

Measurement of 'organizational readiness' contained six 5-point scaled items. We used four 5-point scaled items for measuring social influences. 'Peer interaction' referred to the number (1-8) of different meetings in which the guideline's implementation was discussed. (e.g. a section meeting of RHS policy officers, or a meeting between RHS manager and municipal city councilor). 'Participative decision making' about the guideline's adoption was assessed dichotomously by two items, such as 'Were executive professionals involved in the decision whether or not to use the guideline within the RHS?').

Perceived 'social and administrative legitimacy' was measured by nine 5-point scaled items, such as 'Our municipalities encourage to work in accordance with the recommendations of the guideline'.

3.2.5 Background characteristics

'Organizational background characteristics' referred to RHS type (urban vs. regional). 'RHS's imago' was assessed by two 5-point scaled items such as 'My RHS has a positive image among the municipalities'. To assess the policy support orientation of the RHS, we used one 5-point scaled statement. 'Professional occupation' required one answer (tick box: executive health promoter, health policy officer, team leader, manager, and other). We used an open gray box for 'working experience' (in years), and five options for 'perceived work pressure' (1 = too low, 2 = low, 3 = moderate, 4 = high, 5 = too high). For measuring 'subjective knowledge of the guideline', we used three 5-point scaled questions (e.g. 'I know where to find the guideline'). 'Objective knowledge' (of guideline content) was assessed by five 3-point scaled items, like 'The guideline contains methods for social marketing to enhance political and administrative base of support' (1 = yes, 2 = no, 3 = don't know). (See additional file I: DOI 10.1186/s12913-017-2499-2).

3.3 Analysis

First, we assessed the univariate associations between guideline use and the determinants in our framework by means of Chi-squared tests for nominal variables, non-parametric Mann-Whitney U Test for ordinal variables, and T-tests for continuous variables. Only determinants associated with guideline use ($p < 0.1$, two sided) were entered in the multivariate logistic analysis (forward selection). Finally, mean score differences between users versus non-users of the guideline were computed for each individual item of the determinant(s) in the final multivariate model.

A similar stepwise multivariate linear regression approach was used for analyzing the determinants of completeness of use.

3.4 Results

3.4.1 Respondents' characteristics

The questionnaire was sent to 304 regional public health professionals, and was returned by 120. For identification of potential respondents we used the national RHS department address files. These files contained addresses of RHS functions (such as managers and former employees) who were not meant to (and actually did not) respond to the questionnaire.

A check with all RHS's revealed that RHS organizations had insufficient insight into the exact number of policy advisors. Respondents with functions other than policy advisor or health promoter, 14 in total, were excluded from analysis. Also, excluded were 33 respondents who returned incomplete questionnaires (i.e. without information on primary outcomes). Our final dataset included 73 complete cases and all (28) Dutch RHS organizations were represented by at least one professional.

3.4.2 Outcome: Guideline use and completeness of use

Of all respondents, 35 used the guideline, 38 did not. Among the 35 respondents who used the guideline, thirty-one respondents had used at least one health topic. The topic most often used was obesity (n = 19), followed by alcohol (n = 11), smoking (n = 6), sexual health (n = 6) and depression (n = 4). The checklists for policy planning were used by 14 respondents. Use of checklists was highest for checklist B (policy preparation; n = 10), followed by C (policy formulation; n = 9), E (policy preconditions; n = 7), D (policy execution and evaluation; n = 6) and A (policy context; n = 5). These results showed that, except for the topic 'obesity', guideline use by RHS professionals was rather moderate.

Of the user group, 18 used only one public health topic or one checklist and 17 used 2 to 7 topics or checklists. The average score for completeness of guideline use was 2.37 (sd = 1.78; range 1-7).

3.4.3 Internal consistency of the determinants

Cronbach's alpha ≥0.60 was used as cut off point for internal consistency of the composite variables. These internal consistency checks led to two adaptations: 1) the two self-efficacy items didn't correlate well enough (alpha 0.46) and were therefore analyzed as separate factors (Self-efficacy A: 'The guideline contains methods and tasks which I can actually perform'; Self-efficacy B: 'I don't think I can exchange my own routines with the new methods prescribed by the guideline), and 2) 'Organizational readiness', (9 items, alpha = 0.50) was split into two subscales, labeled as 'Encouragement' (referring to the presence of deliberate activities to promote guideline use) and 'Organizational readiness' (referring to the presence of interdisciplinary communication and sharing of knowledge and aspirations on integrated health targets in the RHS's hierarchy). The alpha scores for the final constructs ranged from 0.61 to 1.0 (table 1).

3.4.4 Explaining guideline use

The univariate associations found between determinants and guideline use are presented in table 2. Of the background characteristics, only subjective knowledge and objective knowledge appeared associated with guideline use ($p < 0.10$). Of the proximal and distal determinants, only perceived task responsibility and usability were significantly related to guideline use ($p < 0.05$). The intercorrelation between these two determinants appeared to be moderately high: $r = 0.65$ ($p < 0.001$).

When objective knowledge, subjective knowledge, task responsibility, and usability were entered in the multivariate logistic model according to their theoretically expected order (forward selection), only 'usability' remained significant in the final model with OR 5.86 (1.68-20.5). The model fit (proportion of explained variance) appeared rather weak (Nagelkerke R Square 0.17).

For more in-depth insight into usability, as determinant of guideline use, we assessed the mean score differences of the 19 usability items between users versus non-users

(Mann-Whitney U-tests). Table 3 only shows the mean scores differences that were statistically significant at $p < 0.05$.

Beliefs showing relatively high scores among both users and non-users referred to effective collaboration with other sectoral policies on the health topics covered by the guideline (mean = 4.41), and perceived fit with current national policies, regulations and laws (mean = 4.14). We found relatively low scores on perceived procedural clarity of the guideline (mean = 3.67) and on the number of examples to work on your own with the guideline (mean = 3.71).

The largest differences between users and non-users were found in their perception of how well the guideline is based in science, and their perceived clarity of the leads offered by the guideline for developing local health policy.

3.4.5 Explaining completeness of guideline use

Univariate analyses showed that completeness of use was only significantly associated with Self-efficacy A ('The guideline contains methods and tasks which I can actually perform'; Spearman's rho = 0.36; $p < 0.05$) and Self-efficacy B ('I don't think I can exchange my own routines with the new methods prescribed by the guideline'; Spearman's rho = 0.44; $p < 0.01$). The intercorrelation of the two self-efficacy items was rather strong (Spearman's rho = 0.54; $p < 0.001$). The multivariate linear regression on completeness of use (forward selection) showed that only Self-efficacy B entered the model ($\beta = 0.43$, 95% CI: 0.24-1.70). The model fit (proportion of explained variance) was weak (R Square 0.18).

Table 2 Determinant scores according to guideline use

Determinants	Outcome measures	Total (n = 73)	users (n = 35)	non-users (n = 38)	p
Person					
Outcome expectancy	mean (SD)	3.15 (0.65)	3.17 (0.58)	3.14 (0.71)	0.93
Self-efficacy (A)	mean (SD)	3.90 (0.85)	4.00 (0.77)	3.82 (0.93)	0.42
Self-efficacy (B)	mean (SD)	3.89 (0.91)	3.91 (0.78)	3.87 (1.02)	0.97
Task responsibility	mean (SD)	4.09 (0.81)	4.30 (0.71)	3.89 (0.85)	0.028*
Usability	mean (SD)	3.80 (0.50)	3.97 (0.36)	3.64 (0.55)	0.002*
Organization					
Encouragement	mean (SD)	2.12 (0.94)	1.99 (0.92)	2.25 (0.95)	0.15
Organizational readiness	mean (SD)	3.08 (0.66)	3.10 (0.60)	3.06 (0.71)	0.52
Peer influence	mean (SD)	3.06 (0.76)	3.15 (0.84)	2.97 (0.66)	0.29
Peer interaction	mean (SD)	1.84 (1.68)	2.09 (1.58)	1.61 (1.75)	0.14
Participative adoption decision	%	42.5	48.6	36.8	0.31
Social and administrative legitimacy					
legitimacy (mean (SD))	mean (SD)	2.84 (0.45)	2.82 (0.53)	2.86 (0.36)	0.68
Background variables					
Organization type: urban RHS	%	5.5	2.9	7.9	0.67
RHS with research dept.	%	42.5	45.7	39.5	0.59
RHS with health promotion dept.	%	68.5	62.9	73.7	0.32
Imago	mean (SD)	3.68 (0.69)	3.67 (0.73)	3.70 (0.66)	0.75
Project/policy-oriented	mean (SD)	2.82 (1.09)	2.86 (1.19)	2.79 (0.99)	0.84
Professional occupation: health promoter	%	42.0	34.4	48.6	0.23
Work experience in years	mean (SD)	7.82 (6.78)	7.66 (6.29)	7.97 (7.29)	0.85
Work pressure	mean (SD)	3.60 (0.60)	3.60 (0.60)	3.61 (0.60)	0.96
Knowledge of guideline					
Subjectively (availability)	mean (SD)	1.92 (0.36)	2.00 (0.00)	1.84 (0.49)	0.06*
Objectively (content)	mean (SD)	1.49 (1.29)	1.77 (1.29)	1.24 (1.26)	0.09*

*p<0.10

Table 3 Mean score differences and standard deviations in perceived usability between users vs non-users of the guideline [a]

Behavioral beliefs (range 1-5)	Total (n = 73) (mean (sd))	Users (n = 35) (mean (sd))	Non-users (n = 38) (mean (sd))	Significance of difference *p*
The guideline offers me a clear guidance for the development of local health (policy)	4.10 (0.89)	4.37 (0.77)	3.84 (0.92)	0.007
The guideline contains clear instructions for RHS application	3.67 (0.85)	3.91 (0.82)	3.45 (0.83)	0.010
I expect that collaboration with other sectoral policies actually leads to a more effective approach to the guideline's five health topics	4.41 (0.88)	4.66 (0.64)	4.18 (1.01)	0.025
I think the guideline's concepts are scientifically well-founded	3.86 (0.84)	4.17 (0.66)	3.58 (0.89)	0.002
I think the guideline offers a sufficient number of examples to work on my own	3.71 (0.86)	3.91 (0.82)	3.53 (0.86)	0.023
I think the stepwise approach of the policy cycle is quite useful in my RHS practice	4.00 (0.76)	4.26 (0.70)	3.76 (0.75)	0.005
The guideline provides sufficient flexibility for use in specific local contexts of RHS	4.07 (0.84)	4.31 (0.72)	3.84 (0.89)	0.012
I think RHS perspectives on developing local health are compatible with the guideline's perspectives	3.81 (0.76)	4.00 (0.64)	3.63 (0.82)	0.038
The guideline fits in well with current national policies, regulations and laws	4.14 (0.79)	4.34 (0.80)	3.95 (0.73)	0.018

[a] Items which showed no significant difference, referred to: ease of finding themes in the guideline, alignment with other policy instruments, fit with RHS's' own policy instruments, acceptability of time required for preparing the application of the guideline, and the applicability of specific guideline components within their RHS organization.

3.5 Discussion

The main goal of this study was to explore the determinants of implementation of a public health policy guideline within Dutch RHS's, since these should be the primary target for strategies aiming to improve implementation.

The questionnaires of 73 respondents (24% out of 304 health professionals approached) appeared eligible for analysis.

About half of these respondents reported to use the guideline. The guideline was most often used within the context of the prevention of obesity. This corresponds to the relatively high priority of obesity prevention in both national and local public health policies in the Netherlands. [28]

In the univariate analysis of guideline use, we found 'knowledge', 'task responsibility' and 'usability' (procedural clarity), and self-efficacy to be related to the use versus non-use of the guideline. The analysis of determinants of guideline use also showed subjective and objective knowledge to be associated with guideline use (table 1).

To improve implementation of the guideline, dissemination of knowledge about the guideline should be improved in municipalities and in regional health services. This was also confirmed by the interview results indicating that not all professionals and managers were aware about both the availability and the guideline's core objectives. Besides media exposure, such as articles in professional journals, presentations online or at conferences, awareness can be increased by interpersonal communication. The latter provides the opportunity for exploring alternative plans for implementation that are tailored to the characteristics of the local setting in which the municipality and regional health service operate. The planning process should account for shared decision making by professionals and management within and between the local municipality and regional health service. [29] The implementation plan should clarify how application of the guideline fits with the current organization perspectives, vision and still existing methods and tools. Besides, the planning should account for feedback on progress, technical support, and training. [30] Internal communication and collegial interactions can be further initiated via online news channels and the organizations intranet.

The results showed differential perceptions among the professionals concerning their 'task responsibility' with regard to using the guideline. These differences reflect insufficient correspondence between the guideline-related tasks and objectives and their own perception of their professional task-obligations. If not, the outcome might as well express some sort of defensive response of those experiencing uncertainty about their competence relative to the execution of particular guideline related tasks. Nevertheless, implementation of the guideline can be expected to improve by: 1) maximizing procedural clarity about the professionals' core tasks and responsibilities within the context of the guideline [31]; 2) aiming at consensus among the professionals and managers within the RHS on tasks for which both disciplines are to be held responsible; 3) (individual) coaching and feedback on progress during the stage that the guideline is put into practice. [32]

As yet, the results for the determinant 'usability' (including 'procedural clarity') indicate that the guideline does not provide the professionals with enough clarity about guideline-related tasks and responsibilities. Besides, the respondents differed in the extent to which they expressed their need for more explicit guidance and clarity, irrespective of their perceived importance of implementing the guideline.

This may reflect differences in perceived mastery of the professional skills involved

when implementing the guideline as intended. This provisional conclusion is congruent with the overall low 'self-efficacy' scores we also found. Self-efficacy beliefs can be increased by 'vicarious learning': watching role models practicing the intended course of action. [21] This can be accomplished virtually, for example within a training session or by watching a video, and in practice, for example when junior professionals watch seniors performing the intended task. In addition, coaching can help to ensure that professionals gradually gain confidence in executing new tasks. This is also supported by literature on improving self-efficacy beliefs within the context of implementation of guidelines. [33]

3.6 Limitations

Our conclusions are only tentative, because they are based in cross-sectional data and a relatively low number of cases. The response was lower than expected and 47 respondents could not be included in the analyses. Non-response was partly due to the timing of the survey, which was conducted fairly short (nine months) after publication of the (renewed) guideline. For some Regional Health Services, there was no or at least limited opportunity to incorporate the guideline because of the 4-year life cycle of the planning of regional public health policy. So, some regions were in the mid-term of executing their previously planned strategy and were not yet ready for preparation of the proceeding strategy period. This would have been compensated, at least partially, if we had assessed intentional use in the near future.

Selection bias may have affected some of the outcomes if respondents who had used the guideline would have been more willing to complete the questionnaire. In that case the descriptive statistics (percentages and averages) could be biased. However, the main question of this research was to explore associations between variables which are known to be less vulnerable for selection bias. [34]

The amount of explained variance may have been affected by the low number of items used for the assessment of particular constructs. Our intention to develop a questionnaire (based on our research framework) that was feasible to complete within a restricted timeframe, may have been at the expense of the stability of some assessments, especially those based in a single item. Also, the scope of the criterion 'completeness' (of use) is not the optimum when thinking about guideline implementation as intended by the developers. Implementation is more than just the number of themes and/or checklists used in practice, for example it does not account for the number of relevant others (in or outside their own organization) also using the guideline neither for the quality of implementation.

3.7 Conclusions

The results of our analyses indicate that knowledge, perceived task responsibility and beliefs about the guideline's 'usability' are best discriminating professionals who use and not use the guideline. Hence, these are primary targets for improving the implementation of the Guideline for Local Health Policy. For improving completeness of guideline use, attention should be given to the RHS professionals' self-efficacy.

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Chapter 4

Towards local implementation of Dutch health policy guidelines: a concept-mapping approach

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Abstract

To develop a targeted implementation strategy for a municipal health policy guideline, implementation targets of two guideline users [Regional Health Services (RHS's)] and guideline developers of leading national health institutes were made explicit. Therefore, characteristics of successful implementation of the guideline were identified. Differences and similarities in perceptions of these characteristics between RHS's and developers were explored. Separate concept mapping procedures were executed in two RHS's, one with representatives from partner local health organizations and municipalities, the second with RHS members only. A third map was conducted with the developers of the guideline. All mapping procedures followed the same design of generating statements up to interpretation of results with participants. Concept mapping, as a practical implementation tool, will be discussed in the context of international research literature on guideline implementation in public health. Guideline developers consider implementation successful when substantive components (health issues) of the guideline's content are visible in local policy practice. RHS's, local organizations and municipalities view the implementation process itself within and between organizations as more relevant, and state that usability of the guideline for municipal policy and commitment by officials and municipal managers are critical targets for successful implementation. Between the RHS's, differences in implementation targets were smaller than between RHS's and guideline developers. For successful implementation, RHS's tend to focus on process targets while developers focus more on the thematic contents of the guideline. Implications of these different orientations for implementation strategies are dealt with in the discussion.

Key words: policy and implementation, municipality, integrated health promotion, network analysis, evidence-based guidelines

Chapter 4

Towards local implementation of Dutch health policy guidelines: a concept-mapping approach

4.1 Introduction

This study refers to guideline implementation in public health and focuses on characteristics for implementation (strategies) of a local health policy guideline in health service organizations. In the Netherlands, local authorities and Regional Health Services (RHS's) struggle with implementation of local health policy and research shows that guideline use lags behind. [1] Therefore, this study aims at developing building blocks for an implementation strategy of guidelines in public health practice. General research knowledge on diffusion and dissemination theories as well as specific research in implementation of policy instruments in health service organizations provide a basis for guideline implementation models.

The systematic review by Greenhalgh et al. [2], is considered a landmark in implementation research. [3] Greenhalgh identified 13 research areas with relevant evidence for the diffusion of innovations in health service organizations, and distinguished two contrasting approaches: the 'rational model' and the 'participatory model' for implementation. According to Greenhalgh, early implementation studies, reflect a more rational approach, stressing the individual innovation and/or individual adopter as the most relevant unit of analysis, and are characterized mainly by a linear representation of the implementation process. Greenhalgh states that later studies, particularly in the area of health promotion research, show the emergence of a more radical 'developmental' agenda, in which a one-way transmission of advice from the change agency tot the target group has been replaced with various models of partnership and community development. [2] These studies represent the participation model, using people's and organizations' needs and experiences in everyday practice as a starting point for dissemination of an innovation.

The so-called Blurring Boundaries model which was developed in Australian public health research and resulted from critical evaluation of current implementation perspectives (Knowledge Translation and Actor Network Theories) is an example that builds further on the participation model. This model facilitates shared decision making and shared priority setting through recognizing values of 'the other' without denying differences of actors involved. Regarding knowledge translation, and in order to achieve conditions for

effective connections between actors, the Blurring Boundaries model points at the necessity to find facilitators and appropriate actions that can serve integration of research, policy and practice, and that can also explain how and why the actions work. [4,5] Armstrong's research in knowledge translation strategies partly answers this question by developing the 'KT4LG' intervention (Knowledge Translation for Local Government), which includes group focus on relevance and priority of public health issues to bridge the evidence-practice gap. [6]

Systematic reviews and evaluation of knowledge translation strategies in Canadian public health arrive at similar conclusions: to be effective, knowledge translation strategies in public health need more emphasis on identification of organizational factors to meet the needs of individual participants, organizations and knowledge providers. [7,8,9]

In guideline implementation literature wherein the emphasis is placed on the individual adopter, Fullan stresses taking into account theory and views or beliefs of practitioners who are intended to use the innovation (bottom-up). [10] Available research from predominantly clinical settings shows that adherence to guidelines is associated with many factors, such as the users' outcome expectancies, knowledge and attitudes [11,12], organizational and economic conditions [13,14], administrative involvement [15], commitment of the parties involved [16], and factors associated with the implementation process itself. [17,18,19] In implementation research by Moulding, besides emphasis on social and behavioral theories for exploring clinical implementation barriers at the individual level, we also find an argument for pre-implementation assessment of 'views of groups and individuals outside the immediate hospital environment' to define individual and organizational levels at which interventions for implementation should be targeted. [20] These conclusions seem to indicate increasing relevance of the participation model in which network perspectives come into play. An overall feature in the theoretical perspectives of these authors includes the use of both bottom-up and top-down strategies in implementation processes, for which Matland's policy implementation theory laid the basis. [21] Matland's insights contributed to the bottom-up versus top-down debate by conceiving the implementation process as influenced by local conditions such as resources, coalitions, activities and distribution of power. [22]

Recent research shows an emergence of health policy guidelines at national and local levels in many high-income countries. Although these guidelines contain recommendations for action, they are still 'limited in their ability to organize and implement concrete bottom-up (i.e. local) action'. [23] This study wants to contribute to the expressed need of developing practical approaches that can support local policy makers, researchers and practitioners in enhancing knowledge-based collaboration.

In the Netherlands, municipalities have a statutory role in protecting and promoting the health of their citizens (Dutch Public Health and Preventive Measures Act, 2003). [24] Since 2003, based on the National Public Health Status and Forecast Report, the Dutch Ministry of Health has at national policy level given priority attention to the prevention of obesity, diabetes, alcohol abuse, smoking and depression (Ministry of Health, Welfare and Sport, 2003). [25] Subsequently, the Ministry has encouraged local authorities to develop policies aimed at diminishing these health problems. As a regular Municipal Contractual, the RHS has a key role in providing advice and support to local authorities for developing their health policies. Since 2006, the Ministry has equipped municipalities and health services with guidelines to support the development and implementation of local health policies. Four guidelines, also incorporating recommended interventions to address obe-

sity, alcohol abuse, smoking and depression were issued separately and were published sequentially in a period of 2 years.

As the Ministry of Health aims to ensure better alignment between national and local development of health policy, it calls on municipalities to acquire the national priorities of health issues in their local memorandum. The four guidelines were expected to contribute to the diffusion of this alignment. However, preliminary research indicated that they were insufficiently used by the municipalities, RHS's and health care providers (National Institute for Public Health and the Environment, 2008). In 2010, the four separate guidelines were merged into one guideline, the 'Healthy Community Guideline' (hereafter 'guideline') (National Institute for Public Health and the Environment, Centre for Healthy Living, 2010). [26]

To develop a targeted implementation strategy, implementation targets for the revised guideline need to be made explicit. Therefore, this study aims to identify specific goals for improving local implementation of the guideline in public health practice.

Guideline users' and developers' perspectives of implementation can be best explained by both individual and contextual factors. These contextual factors may refer to the professionals' own organization or to external organizations. [27] Since the guideline contained no usage protocol nor clear end goals for its implementation[1], we presumed that among users and developers, divergent ideas could exist on implementation as intended. Subsequently, these particular targets would require different choices for the implementation strategy.

For this study, we consider concept mapping for exploring characteristics of successful implementation of policy guidelines consistent with current views, developments and demands in participative implementation research for public health policy. By this approach, we follow conclusions of research in effective dissemination approaches by Harris, who developed a dissemination framework in which tailoring approaches to individual organizations is considered a necessary phase. The implementation process 'is organization-specific and involves a complex series of steps'. [28]

The international research provides an extensive amount of knowledge when it comes to barriers for clinical guideline implementation. Less has been written on guidelines for public health priority setting within a political-administrative context. [22,29] In addition to the aim of reaching common goals and shared understanding of successful guideline implementation, by focusing at potential differences in stakeholders' - and guideline developers' views, this study responds to the need for knowledge of specific tailoring strategies that fit within the structure and workflow of public health organizations aiming at local health policies. [30] For guideline developers the results may provide clues and practical directions for incorporating effective dissemination instructions and tools for local implementation, of which recent research has noted the need of further investigation. [23,31,32]

[1] National Institute for Public Health and the Environment, Centre for Healthy Living (RIVM). (2012). Webpage Loketgezondleven.nl: 'Working on an integrated policy: There is no fixed recipe for an integrated policy. The right approach depends on local options.' Bilthoven. https://www.loketgezondleven.nl/gezonde-gemeente/integraal-beleid (last accessed October 6, 2018).

Therefore, this study aimed to answer the following questions:

1. What are the characteristics of successful implementation of the Healthy Community Guideline as perceived by professionals in RHS settings and guideline developers?
2. What are the similarities and differences in these characteristics between professionals in RHS settings and guideline developers?

4.2 Methods

4.2.1 Concept mapping

Our main interest was to explore similarities and differences in perceived characteristics that play a significant role in the complex process of implementing the Healthy Community Guideline at the local level. To uncover these characteristics by two RHS user groups and guideline developers, and due to its participatory basis, we preferred to choose 'concept mapping' as research method in order to meet these specific demands. [33] Concept mapping is a method by which groups jointly conceptualize a complex topic to serve as a framework to guide planning and evaluation. The concept mapping process ends up with an interpretable pictorial map of ideas and thoughts of involved participants. It is primarily a group process and so it is well-suited for situations where teams or groups of stakeholders have to work together.

The method as described by Trochim was used. This approach involves an inductive group process combined with deductive statistical analysis and consists of six steps: preparation (identification and inclusion of participants and defining the brainstorm focus), generating statements, structuring statements, graphical representation of statements on a map, the interpretation of the map and utilization in line with the initial question or focus [34,35] (presented in table 1).

4.2.2 Participant groups and stages of concept mapping

In order to compare RHS perspectives among themselves and with those of guideline developers, three concept map procedures were done separately for two RHS user groups and the development group. In addition, separate results allowed the RHS's to define their own targets and subsequent strategies for a pilot implementation to be executed (beyond the reach of this study). Preferably, the brainstorming session in the concept mapping method is performed with a wide and diverse group of 10-20 participants. [34] A larger number can be involved in generating statements and subsequent stages of the process. This variety ensures the inclusion of many different viewpoints, helps to reach a shared understanding and can support broad adoption of the final conceptual framework. For all three concept map procedures, the participants were selected through purposive sampling. [36]

Prior to their participation in the concept map meetings, participants were informed that contributions included in the results would be made anonymous. Results would not be reducible to individuals or individual organizations. On the basis of these conditions and prior to the execution of the concept map meetings recorded on tape, participants agreed to take part and gave verbal informed consent to use the results in publications on the concept maps. This study was not subject to the Dutch Medical Research Involving Human Subjects Act and therefore medic ethical assessment was not compulsory. Table 1 shows the participants and all stages of concept mapping from preparation to interpretation.

In each concept map procedure, participants were asked to complete the following task

in a brainstorm meeting: Formulate specific characteristics of successfully achieved implementation of the Healthy Community Guideline for municipal health.

At the start of all four brainstorming sessions, summarized information on the guidelines' content and on the rules for brainstorming was similarly provided to achieve a common mindset for the purpose of the meetings. During the process of generating statements, no discussion was allowed on the items' relevance, though questions to clarify and specify characteristics were encouraged.

Participants were asked to perform their structuring tasks individually. They rated the statements on a five-point Likert scale by dividing the cards into five equal piles of increasing importance. Secondly, participants piled the statements into groups, based on their meaning or their content, and gave these groups covering labels. For each task, participants subsequently filled out the rating and sorting forms with the numbered statements.

For analyzing the data, we used Ariadne software for concept mapping. [37] The program uses the sorting data as input for a principal component analysis (PCA), which translates correlations between statements into coordinates in a multidimensional space. The first two dimensions (horizontal and vertical) of the PCA solution for each statement are projected onto a point map. [37] Through cluster analysis, the program determines which statements belong together and form groups of statements on the map. Based on the ratings by participants, the software provides a mean rating to the statements as well as to the clusters. The program gives a default cluster solution of 18 clusters. By varying the number of clusters and checking the resulting statements by content in each cluster, a final number of clusters was chosen that still made sense for their conceptualization. This was done for each concept map by subset groups of three or four participants.

Finally, the subset groups formulated labels that best described the content of the clusters, based on the statements. The researchers then ascribed the final cluster labels. The axes of the maps were qualitatively interpreted and labeled by the researchers.

Table 1 Composition of participant groups and involvement stages for concept mapping (CM)

Study	Participants	1. Preparation	2. Generation of statements	3. Structuring of statements	4. Graphical reproduction	5. Interpretation
Conceptualizing characteristics of successful implementation of the Dutch guideline for municipal health policy (Healthy Community Guideline)	**CM 1:** Regional Public Health Service (RHS) policy officers (7); RHS project staff (3); RHS operational team managers (6); municipal policy officers (3); Mental Health/ Substance Use policy officers and project staff (4); Homecare manager and dietician (2); Primary care policy advisors (2); sports consultant (2).	**RHS 1** aimed to set implementation targets in their own policy, as well as in the policy of other stakeholders. External stakeholders were invited to participate.	In two separate brainstorming sessions, (12 and 17) participants produced 102 statements; 7 duplicate statements were removed by researchers and conductor. Final calculation with 95 statements.	Statements (on separate index cards) were sent by email to the participants for rating and sorting. Sorting and rating tasks were completed by 18 participants. (excluded 11 forms for incompleteness or absence) Errors were corrected through telephone contacts.	The researcher and project leader entered the statements in the PC. The point map and the cluster solutions were represented graphically, and were discussed by the researchers and the project leader.	The final concept map (CM) was discussed by the researchers and a subset of participants. Researchers added final labels to the CM- clusters and axes for interpretation.
	CM 2: RHS manager/ head of department (1); RHS policy officers (4); RHS epidemiologists (6); RHS project staff (4).	**RHS 2** chose to invite their staff members only to set their own implementation targets.	In one brainstorming session, 15 participants produced 63 statements, 8 duplicates were removed. Final calculation with 55 statements.	In the same session all statements were rated and sorted by 15 participants individually. Errors were corrected on the spot.	The researcher and project leader entered the statements in the PC. The point map and cluster solutions were constructed by the researcher and four participants.	The final concept map (CM) was discussed by the researchers and all participants. Researchers added final labels to the CM- clusters and axes for interpretation.
	CM 3: Developers: Representatives of National Health Institutes for obesity (2), alcohol (1), smoking (1), depression (1), consumer safety (1), sexual health (3), Dutch National Institute for Public Health and the Environment (2) including Head of Coordination for the guideline).	**Guideline developers** (authors) were invited as representatives of national priority health topics.	6 Participants took part in the brainstorm session. 5 participants contributed to the list of statements by mail. The final calculation of the map was completed with 71 statements.	Statements (on separate index cards) were sent by email to the participants for rating and sorting. Sorting and rating tasks were completed by 11 participants. Errors were corrected by mail and through telephone contacts.	The researcher entered the statements in the PC. The researcher and project leader discussed the cluster solutions and labels with the project leader of Guideline developers.	The final concept map (CM) was discussed by the researcher and project leader with Guideline developers. Researchers added final labels to the CM- clusters and axes for interpretation.

Table 2 Results on items, clusters and dimensions of three concept maps

Map	Top three items and mean ratings	Number of clusters	Top three clusters and mean ratings (scale 3.25 - 3.50)
RHS[a] 1	*(n = 95)*	10	
	1. Municipalities use the guideline; **4.28** (SD 1.20) 2. Municipal policymakers actually use the guideline; **4.11** (SD 1.21) 3. RHS policy advisors use the guideline naturally; **4.11** (SD 0.54) (scale: lowest 1.39 - highest 4.28)		1. Usable for municipal policy; **3.36** 2. Joint use in policymaking relevant organizations; **3.33** 3. Usable for practical implementation; **3.32**
RHS 2	(n = 55)	13	
	1. Municipalities use the guidelines' content for integrated policy; **4.20** (SD 1.36) 2. RHS policy advisors have skills to support guideline use by municipalities **4.13** (SD 0.65) 3. Municipal health policymakers are acquainted with the guideline **4.00** (SD 1.87) (scale: lowest 1.47 - highest 4.20)		1. Commitment and use by officials and municipal manager; **3.47** 2. Usage by municipality for systematic policy and integrated health; **3.29** 3. Alignment of execution between municipalities and local partners; **3.29**
MD[b]	*(n = 71)*	12	
	1. The guideline is accepted nationally and locally as a basic tool for developing knowledge and skills for local health policy; **4.45** (SD 0.43) 2. Substantial elements of the guideline are included in the process of municipalities and professionals; **4.18** (SD 0.33) 3. Executive programs contain relations between intermediate goals, interventions and desired outcomes; **4.18** (SD 1.42) (scale: lowest 1.82 - highest 4.45)		1. Guideline components visible in local health policy and practice; **3.41** 2. Increased local health policy performance by municipality and RHS; **3.30** 3. Guideline use contributes to integrated approach and local collaboration; **3.27**

[a] Regional Health Services.

[b] Guideline developers: representing National Health Institutes for obesity, alcohol, smoking, depression, consumer safety, sexual health, Dutch National Institute for Public Health and the Environment.

4.3 Results

4.3.1 Main characteristics of the three separate concept maps

The central objective of all three concept map procedures was to conceptualize the perceived characteristics of successful implementation of the Healthy Community Guideline. Table 2 represents the main outcomes of the three concept maps. (Table 2 is followed by a list of the top 15 statements of each concept map with numbers and ratings).

Concept map 1 (RHS 1) includes 95 statements of RHS members, municipal policy officers and local health organizations. This map shows highest ratings on the clusters 'usability of the guideline for municipal policy', 'joint use in policymaking of relevant organizations' and 'usability for practical implementation'.

Concept map 2 (RHS 2) includes 55 statements. Here, RHS members ascribe the highest ratings to the clusters 'commitment and use by municipal officer and manager', 'usage by municipalities for systematic policy and integrated health' and 'alignment of execution between municipalities and local partners'.

Concept map 3 (developers) includes 71 statements. Developers ascribe importance to the clusters 'visibility of guideline components in local health policy and practice', 'increased local health policy performance by municipality and RHS' and 'contribution to an integrated approach and to local collaboration'.

The axes of both RHS maps are labeled as 'application', ranging from policy to practice and as 'sustainability', ranging from preconditions to usage. The horizontal axe of the developers' map is labeled as 'sustainability', ranging from preconditions to usage, while the vertical axe is labeled as 'compliance', ranging from process to content. This axe refers to the consistent use of the guideline at policy, management and practical levels of application, which should come as a result of national and local adoption of the guideline (Table 2, MD, items 1 and 3).

4.3.2 Differences and similarities between the three concept maps

For the two RHS maps, the top three clusters are quite similar, which suggests substantial agreement between participants on the most important characteristics of 'joint use' and 'usability' of the guideline for municipality and partner organizations. However, in concept map 1, the self-evident use of the guideline is ascribed to the RHS professional (Table 2, RHS1, item 3). In concept map 2, participants see the guideline as a tool that should be used proactively by municipalities, and should be supported by RHS professionals (Table 2, RHS2, items 1 and 2).

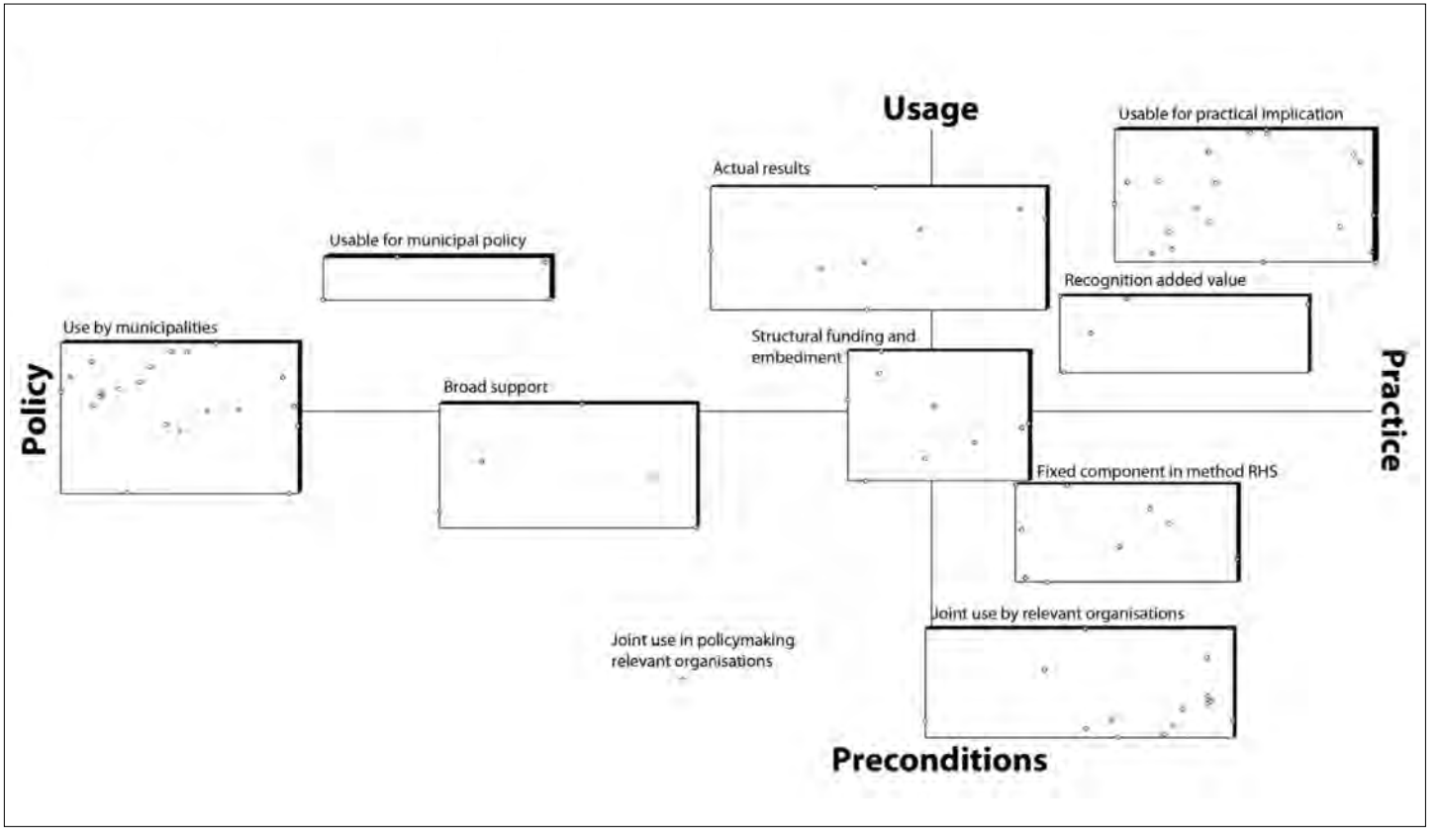
While concept map 1 considers joint use and practical applicability of the guideline within the network of public health partners as the highest ranked features (Table 2, RHS 1 clusters 1 and 2), in concept map 2, commitment and usage of the guideline by municipalities would prove implementation success. In concept map 3 (developers), successful implementation is perceived in terms of visible outcomes as a result of the guidelines' thematic content use on an executive level, such as appointing a specific health issue in the local memorandum (Table 2, MD, items 2 and 3, cluster 1).

In comparison with developers, the RHS maps mention the importance of alignment processes and control issues between local authorities and RHS organizations. Though all three maps agree on relevance of collaboration between local public health partners, the RHS maps show elements of process and relations more explicitly and consider these as important elements for successful implementation of the guideline.

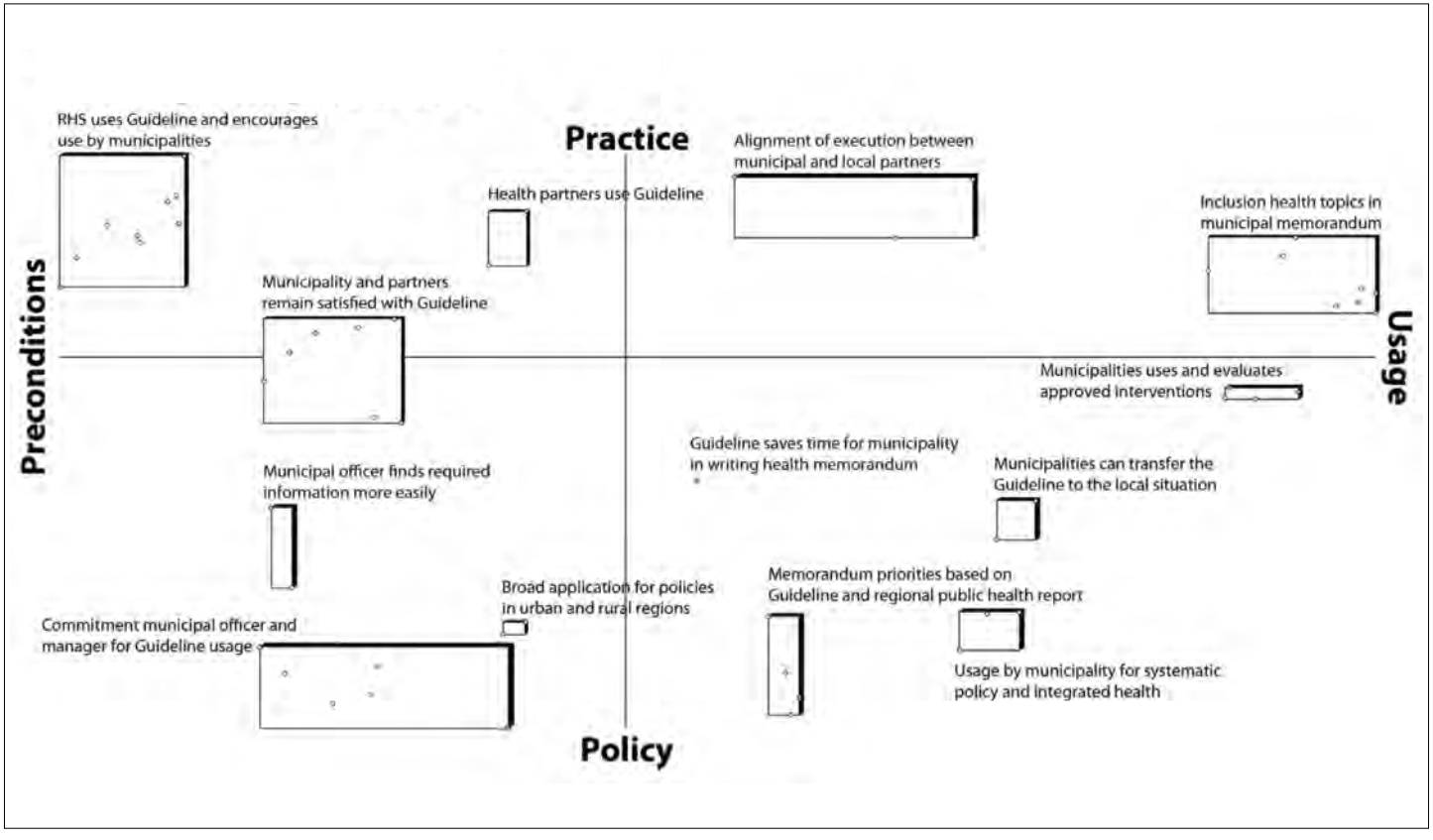
Although the horizontal and vertical axe labels of the RHS concept maps have different positions, their cluster labels appear to have a high resemblance (Figure 1). The difference lies in their highest rated clusters, which is 'usage in policy' in RHS 1, and 'preconditions in policy' in RHS 2. The horizontal axe of the developers' map corresponds with the axes of 'sustainability' of the RHS's. The developers' emphasis on 'compliance' with regard to the guideline in the vertical axe deviates from the RHS axes of 'application'. The thickness of the cluster lines represents the clusters' rating.

Fig. 1 Separate concept maps of two Regional Health Services (RHS) and Guideline developers.

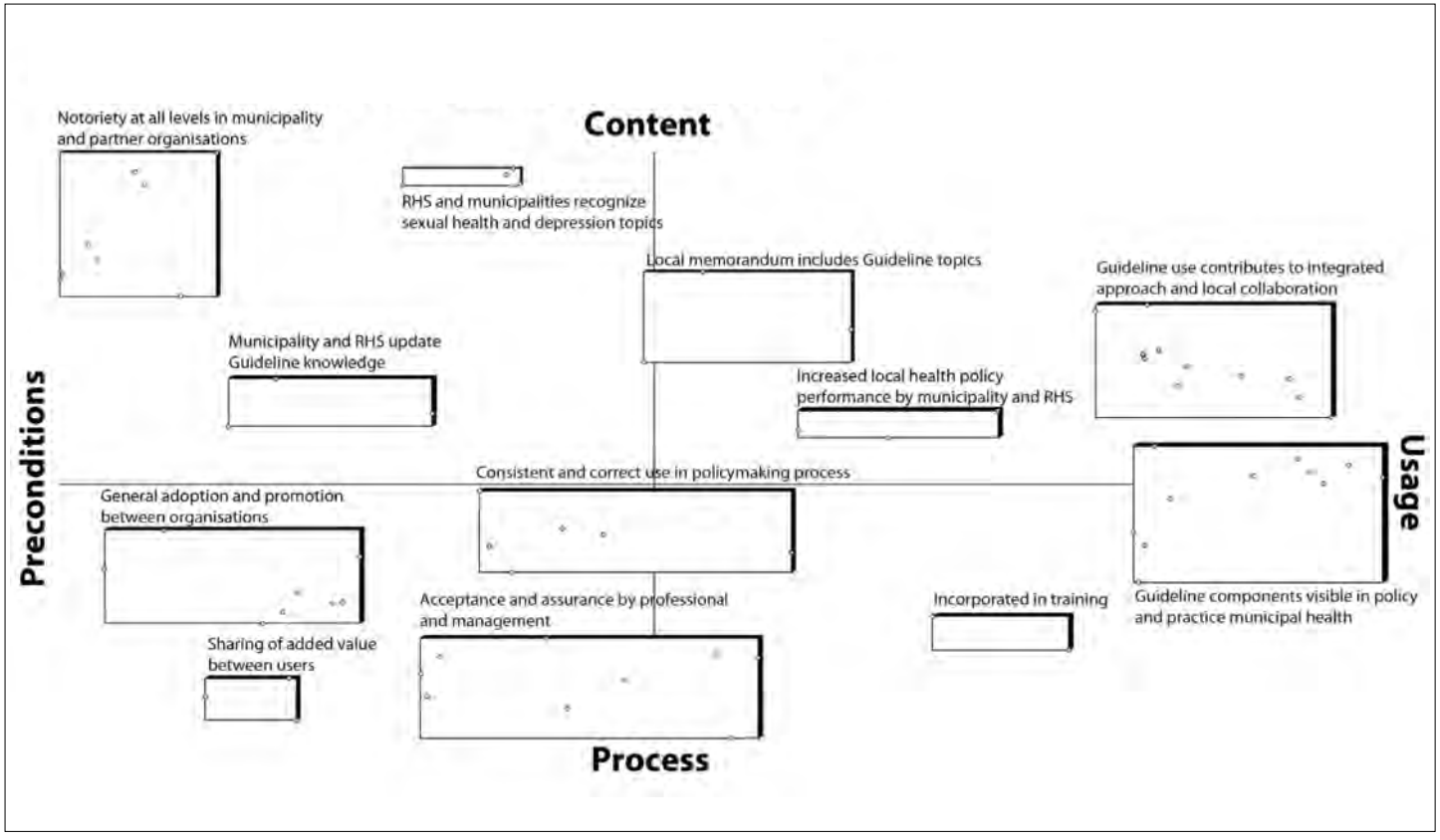
Concept map 1: RHS 1



Concept map 2: RHS 2



Concept map 3: Guideline Developers



List of top 15 statements including item numbers and ratings for the three concept maps

CM 1: RHS 1 top 15 / 95 statements: Regional Public Health Service (RHS) policy officers (7); RHS project staff (3); RHS operational team managers (6); Municipal policy officers (3); Mental Health/ Substance Use policy officers and project staff (4); Homecare manager and dietician (2); Primary care policy advisors (2); Sports consultant (2).

	Statement	Item number	Rating
1.	Municipalities use the guideline	90	4.28
2.	Municipal policymakers actually use the guideline	16	4.11
3.	RHS policy advisors naturally work with the guideline	43	4.11
4.	The guideline enhances the quality of local health	73	4.11
5.	Municipalities can customize health topics of the guideline to their local situation	9	4.00
6.	The guideline provides municipalities with achievable goals	91	4.00
7.	Practical instruments for enhanced usability of the guideline are provided	82	3.94
8.	The guideline is continually assessed and adjusted in accordance with practice	24	3.89
9.	The guideline provides specific tools to achieve goals	95	3.89
10.	The guideline is easy to use within the municipal context	58	3.83
11.	The guideline leads to concrete implementation of the health topics	2	3.78
12.	The guideline is well embedded in cyclic municipal policy	21	3.78
13.	There really is integrated policy	67	3.72
14.	The guideline is handy and easily accessible	18	3.67
15.	For each health issue, the guideline includes a mix of interventions according to the five pillars	29	3.67

CM 2: RHS 2 top 15 / 55 statements: Manager/head of department (1); RHS policy officers (4); RHS epidemiologists (6); RHS project staff (4).

	Statement	Item number	Rating
1.	The guideline content is used by municipalities for integrated policy	11	4.20
2.	RHS policy officers know how to coach guideline usage by municipalities	20	4.13
3.	The municipal policy officer knows the national guideline	9	4.00
4.	The guideline stimulates cooperation and coordination between local health partners	49	4.00
5.	The local memorandum contains concrete execution programs	2	3.73
6.	The municipal policy officer uses the national guideline	6	3.73
7.	The municipalities are enthusiastic about the use of the guideline	17	3.73
8.	Municipal policy officers find required information more easily in the guideline	18	3.73
9.	RHS policy officers have the skills to use the guideline	19	3.73
10.	Municipalities use the guideline for clear decisions in the local memorandum	33	3.73
11.	The municipalities can tailor the guideline content to their local needs	16	3.47
12.	Municipalities deliberately choose to use the guideline	31	3.47
13.	The guideline helps to improve the quality of local health policy	48	3.47
14.	Municipalities use the guideline repeatedly for future memoranda	53	3.47
15.	Policy professionals stimulate each other to use the guideline	26	3.40

CM 3: Guideline developers top 15 / 71 statements: Representatives of National Health Institutes for obesity (2), alcohol (1), smoking (1), depression (1), consumer safety (1), sexual health (3), Dutch National Institute for Public Health and the Environment (2) (including Head of Coordination for the guideline).

	Statement	Item number	Rating
1.	The guideline is nationally and locally accepted as a basic tool for the developing knowledge and skills for municipal health policy	12	4.45
2.	Specific health items of the guideline be included in the process of municipalities and professionals	18	4.18
3.	Executive programs show coherence between goals, planned interventions and desired outcomes	51	4.18
4.	The guidelines' structure for phased policy is recognized in local health practice	28	4.09
5.	The guideline leads to structural focus on priority health topics	40	4.09
6.	Guideline usage saves time and benefits execution of local health practice	15	4.00
7.	The use of effective measures and interventions increases	24	4.00
8.	The guideline is supportive to cooperation between local organizations	32	4.00
9.	The four main cities and half of the medium-sized municipalities have taken note of the guideline	4	3.91
10.	The guideline serves as a standard consultation tool in all four phases of policy process	59	3.91
11.	Guideline usage stimulates approaches for integrated policy	60	3.91
12.	Municipalities and professionals have used guideline components for their work	7	3.82
13.	Executive programs show coherence between health topics and joint risk groups	49	3.82
14.	Usage evaluation of the guideline shows added value	20	3.73
15.	The guideline has led to increased priority for local health in municipalities	23	3.73

4.4 Discussion

4.4.1 Characteristics of successfully achieved implementation for RHS's and guideline developers

This study aimed to detect perceived characteristics for successful implementation of a local health policy guideline. We found that these characteristics were dependent on the context of separate RHS organizations and differed from guideline developers' perspectives. The different outcomes of the concept maps lead to different emphases for implementation strategies.

The RHS's' orientations on alignment processes and control issues between local authorities and RHS's indicate that collaborative relationships are highly valued and understood as essential for implementation success. Presumably, RHS experiences with practical collaboration issues, such as dealing with conflicting interests between political and health advocates, will affect the prioritization of characteristics by RHS's. These orientations correspond to contemporary assumptions of 'integrated or interactive knowledge translation' in Dutch public health networks [38], as well as to international research findings we mentioned earlier. [5] At the local level, guideline dissemination has to involve political administrative actors, medical-, social- and citizens organizations. Therefore, to be effective implementation strategies have to account for actors' preferences and behavior, in order to identify suitable approaches for acceptance and use of innovations.

The developers' orientation on clear cut attention to health issues in municipal health policy memoranda seems to result from their commitment to institutional health-promoting goals for these health issues. Generally, developers are further away from processes of local collaboration.

4.4.2 Similarities and differences between RHS perspectives

The two RHS respondent groups involved in the concept mapping were not alike. This difference in compositions could have caused the differential appraisal of characteristics of successful implementation. However, in spite of the involvement of partner organizations and municipalities in the brainstorming sessions of RHS 1, these differences in results with RHS 2 were small. The characteristics as described by the two RHS's show strong resemblance in terms of mutual use and strengthening cooperation and coordination with other public health partners. One of the guidelines' fundamental premises, 'integrated health policy', seems to be appraised equally among all parties, including guideline developers. On the other hand, different emphases occur between the RHS's on targets for internal implementation. While RHS 1 shows a strong orientation on internal use of the guideline as the professional standard, RHS 2 considers advising municipalities to use the guideline as a priority manifestation of implementation success. This high rating on municipal commitment seems to indicate a high acceptance in RHS 2 toward the guideline, for policy advisors implicitly acknowledge its relevance as a health policy instrument for municipalities. In RHS 1, guideline acceptance is also rated as a priority, considering implementation targets of cluster 4 (fixed component in methods of RHS) and top 3-item 3 (RHS policy advisors use the guideline naturally).

RHS 1 stresses practical applicability of the guideline for RHS members, whereas RHS 2 primarily stressed the RHS advisory skills to support the use of the guideline by municipal policy officers. These different perspectives might be ascribed to different task orientations regarding municipal advisory in which RHS 1 seems to stress executive health

promotion tasks and RHS 2 to policy advisory tasks. Different emphasis on executive or advisory skills appears to be relevant for determining customized implementation targets in the separate RHS organizations.

4.4.3 Similarities and differences between RHS's' and developers' perspectives

As RHS's, guideline developers perceive 'local collaboration' as an important indicator for implementation success. But above all, they point to the visibility of substantial elements of the guideline in local health policy. The developers' concept map does not address the process of the guideline's implementation within the RHS organization and their interaction with municipalities. In contrast, the involved RHS's stress the presence of these process elements at all desired levels of their organization as important manifestations of implementation success.

4.4.4 Methodological considerations

The concept mapping process generally allows to represent all perspectives of relevant stakeholders in one map, which can create a broad sense of shared ownership and commitment with the final results of the map. However, we deliberately chose to compare perspectives of three separate concept maps to uncover differences in perceived characteristics of successful implementation between guideline developers and RHS's. Moreover, the RHS concept maps were meant as first step to develop tailored implementation strategies for the RHS's (beyond the scope of this study). The number of participants chosen by RHS 2 was limited and did not include external partners or municipalities. This brings us to methodological issues when it comes to internal and external validity of the concept map results.

Since the RHS's aimed for participant diversity, the concept mapping groups were formed using purposive sampling. This targeted sample ensured participant diversity of public health partners in RHS 1, and variety of disciplines in RHS 2, which is an important requirement for the concept mapping procedure. [34,35] Sampling for proportionality was therefore not the RHS's', nor the researchers' primary concern. The main objective was to find specific characteristics for tailoring an implementation strategy that could fit the contextual circumstances. This may have affected the outcomes, in a way that different definitions of successful implementation (between the 2 RHS's) would lead to different characteristics. In terms of research aimed at generic factors, this is a weakness. In terms of directions for customized implementation strategies, using targeted sampling can be a strength. It is clear that when successful implementation is defined differently, one will find other characteristics. Repeated concept maps could lead to more insight into both specific factors, and generic factors for implementation of the guideline.

We considered willingness to implement the guideline preconditional for participation in the concept mapping process. From this point, we wanted to observe how basic circumstances in both RHS's could lead to different choices in preparation and in the actual implementation of the guideline. Therefore, the concept mapping participants were determined in consultation with those responsible for implementation.

Each RHS wanted a support base within a specific group of stakeholders. RHS 1 invited external representatives next to its own staff members to gain their approval to work with the guideline, and to gain wider support for determining their own implementation targets. RHS 2 preferred to conduct a concept map with only participants of their own organization. To reach diversity of perspectives among participants of the concept maps, the selection of participants through purposive sampling ensured a spread representation of

RHS disciplinary levels (management, policy officers, executive health promoters) in both RHS's. For the separate RHS purposes, to guide their own tailored and targeted implementation strategy, and with their own specific selection of stakeholders, internal validity of the concept maps is provided. However, due to RHS's' specific choices of stakeholders, external validity is not sufficiently provided, for the results are mainly useful for the specific local public health practices and have limited generalizability. Nevertheless, the RHS concept maps suggest external validity to some degree, since their different selections of participants still showed the same items. This indicates a possibility of tracing generic elements when the procedure would be repeated in another RHS context. In order to retrieve generic constituents, similar concept maps could be repeated and conducted with other RHS's, municipal representatives and similar stakeholders.

In a comparable study in a RHS context, Van Bon-Martens et al. (2014) suggest that external validity of a concept map for theory development in evidence-based public health can be increased if concept maps on the same topic are held several times in several groups of stakeholders or regions. Different stakeholders (professionals, researchers, policy makers) crossing disciplinary borders, will add new statements and thereby contribute to the enrichment of the existing scientific evidence by adding new knowledge from theory and practice. [39]

The three separate concept maps allowed us to compare RHS's' and developers' perspectives independently, since their generation phases of statements went along separate lines. There are differences in which the successive steps were completed in time between the three concept map procedures. Regarding the 4-hour session of RHS 2, participant burn out could be marked as limiting comparability of the maps. However, the generating phase took place at the start of each session and provided the separate statements in which the most important differences occurred. As intended, the comparison provided a better insight into characteristics of successfully achieved implementation as perceived by RHS's (users) and developers of the guideline. In this respect, the concept map method answered the initial research question of exploring similarities and differences in perceived characteristics. Therefore, a fair conclusion seems that concept mapping, when its outcome is based on local ownership of relevant stakeholders, can contribute to formulate targets for tailored implementation strategies by setting shared goals for a specific user group. Our choice for studying implementation goals in silos was motivated by deliberately giving space to possible differences. If the concept maps were conducted in mixed groups, specific context related characteristics might have been harder to detect. A concept map in a mixed group would have yielded more generic implementation characteristics for a shared conceptual framework among developers and user-groups. However, the concept maps were also used for their practical relevance, as a first step in the implementation process of the guideline. An important result of the individual concept maps was the recognition of the implementation characteristics for those who were directly involved.

From the perspectives of local ownership and direct involvement of relevant stakeholders, concepts based on actor network theory (ANT, as mentioned in the Introduction section) might provide a useful alternative in our search for implementation characteristics. ANT can be defined as a research method with a focus on the connections between both human and non-human entities. [40] In the ANT, the process of (knowledge) translation is

explained as the structuring of reality, based on actors (people/organizations/things) and their interactions. [41] The ANT focuses on how interactions of different actors arise and on the effects of these interactions. These interactions can be displayed in a network, in order to reconstruct who contacts who, who (or what) has influence and which actors are involved in the implementation of a best practice. As long as the players continue to see the value or necessity, the network endures and leads to results. Translation is the process in which actors reinterpret the mission and values of an improvement project and therefore play a key role in the development of working practices within an improvement theme, in this case the implementation of a guideline for local health policy. [42]

4.4.5 Relevance of the results for implementation of the guideline in practice

The results of the concept maps can be discussed within RHS's in order to explicate expectations about their own implementation efforts. In the involved RHS's, these expectations might result from different task orientations regarding municipal advisory. To support the implementation, guideline developers could provide municipalities and RHS's with tools and sufficient indicators for monitoring progress in the implementation process. One might think of concrete methods for alignment of RHS goals with different municipal sectorial policies. Since RHS1 stresses the use of the guideline as a professional standard, for guideline developers, this would require in-depth understanding of RHS organizational structures concerning internal alignment issues between management and professional executives. For RHS 2, the guideline could provide indicators for monitoring progress in advisory methods that encourage guideline use by municipalities.

As mentioned by Gagliardi [31], integration of guideline development and applicability information could strengthen implementation, for example by involving different types of experts (guideline users) in the guideline development and implementation processes. Involvement of practice can lead to inclusion of directions or tools for implementability in guidelines.

4.5 Conclusion

Results of the concept maps show different orientations about successfully achieved implementation by participants from two RHS's and guideline developers. These differences are assumed to originate from participants' various reasons for the use of the instrument. In developing a strategy for adoption of the guideline by different user groups, the question, 'What's in it for me?', needs to be met more specifically for several organizations and employees. The results of a concept map indicate possible targets for supporting adoption and implementation processes within organizations by developing additional practical implementation tools, including methods of tracing users' individual purpose of use. Without the concept maps, the different characteristics had not been found. An implementation strategy aiming at internal adoption of the guideline by RHS professionals and managers would be appropriate for one organization (in this case, RHS 1), but would be a blunder for another.

With regard to the two main questions of this study, the concept map method was suitable for improved understanding of perceived characteristics of implementation success by RHS's and developers. A key observation from this study is the discrepancy between

what is considered crucial for implementation among guideline developers (actual visibility of guideline's thematic content) and what targeted users intend to do with the guideline, which is to align policy processes between RHS, partners, and municipalities. Attention to these policy processes seems particularly important for the distribution of the guideline's content. Policy processes, as we understand from Greenhalgh, rarely follow a linear development and can be characterized as incremental processes, due to their participatory nature and contextual conditions that tend to challenge guideline implementation efforts. When developing the guideline, developers should take into account application purposes of different users that pursue different implementation goals. Subsequently, the provision of implementation strategies should be tailored to these differences. The developers' awareness of differences and similarities in implementation goals in practice can be achieved through improved dialogue between guideline developers and intended users, in this case, the RHS's. The purpose of the concept maps in this study was to contextualize the implementation processes by revealing different policy contexts and by showing directions for tailoring the processes. The individual RHS organizations have an important role in this process, because tailoring implementation from within the organization finds an immediate shape. Although the concept maps of both RHS's show different results, and do not reach a generic implementation strategy, their own emphasis on the individual policy context seems functional and important for implementation.

In conclusion, the concept map results concerning the various perceived characteristics of successful implementation lead to an important recommendation for public health practice. In order to reach better guidance and support base for an implementation strategy, every time and in each organizational setting all relevant stakeholders should jointly explicit their implementation goals. To uncover different user groups' and developers' latent expectations and implementation goals, methods to achieve this explicit formulation, e.g. concept mapping, could be added to the guideline. In guideline implementation research, evidence in the development and use of applicability information is still not extensive and most developers who disseminated guidelines online and in scientific journals lack the resources for developing targeted implementation activities. [31,32] From our results, we found that concept mapping could serve as a specific, and feasible tool for enhancing implementability of guidelines and for facilitating integration of research, policy and practice. However, there are other tools for this purpose. With regard to concept mapping, further studies would yet have to test the supposed benefits of this method for adequate knowledge translation in public health policy development. Examining the significance of 'diversity' in definitions of successful implementation among intended users of policy guidelines, could contribute to developing better tailoring tools for knowledge-based action in local public health.

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Chapter 5

Towards guideline implementation for integrated local health policies: evaluation of an experimental implementation strategy in Regional Health Services

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Abstract

Background: To enhance implementation of a guideline for integrated local health policy, a draft implementation strategy (DIS) was developed. It was hypothesized that the DIS would be feasible and effective to enhance the use of a guideline for integrated local health policy. To examine its feasibility and effectiveness, the DIS was pilot tested simultaneously in two Regional Health Services (RHS's) and compared with the 'care as usual' in two other RHS's that did not receive a predefined strategy for guideline implementation.

Material and methods: The DIS was evaluated in a qualitative way by means of semi-structured individual-and group interviews. We applied the Nutbeam framework for evaluation on: i) program integrity, ii) program reach, iii) program acceptability, and iv) observed change. Comparison of pilot results with the two other RHS's included semi-structured group interviews.

Main findings: Both RHS's conducted implementation largely as planned. The purpose of the guideline for RHS policy objectives was not discussed at all desired levels. Increased guideline use was mainly found among health promoters. Comparison with guideline implementation in the other RHS's revealed information for further evaluation of the DIS.

Conclusion: The feasibility and effectiveness of the DIS applied to building blocks which aimed at alignment of goals and ambitions between RHS management and executive disciplines. Possible implications for future application of the DIS are dealt with in the discussion section of this paper.

Keywords: guideline use, implementation strategy, health policy, public health.

Chapter 5

Towards guideline implementation for integrated local health policies: evaluation of an experimental implementation strategy in Regional Health Services

5.1 Background

Regional Public Health Services (RHS's) in the Netherlands are important contributors to the planning and implementation of local health policies. To professionalize the RHS's' advisory task, the Dutch Ministry of Health facilitates the development and use of evidence-based instruments (e.g. guidelines) that encourage a more systematic planning of integrated local health policies (hereafter called 'ILHP'). One of these instruments concerns the national 'Healthy Community Guideline' (hereafter called 'guideline') which offers interventions to address smoking, obesity, alcohol abuse, depression and sexual health, and recommends tools (e.g. checklists) for developing integrated public health policies. [1]

A central premise of the guideline is that such a health policy preferably addresses multiple determinants of health simultaneously. [2] For this policy, the guideline uses the term 'integrated policy'. This policy focuses on the health/health behavior of individuals interacting with their physical and social environment, indicating that several municipal sectors can contribute to the success or failure of reaching the intended public health goals. The overall purpose of the guideline is to stimulate the use of evidence in the ILHP planning process.

However, as the guideline was insufficiently used by the municipalities and RHS's [3], an investigation was required of the barriers and facilitators to implementation of the guideline. In a previous study, these barriers/facilitators were identified through literature research and examination of RHS practices. [4] The results led to a draft implementation strategy (hereafter called 'DIS') consisting of four building blocks considered relevant for implementation of the guideline in RHS's, i.e.:

i) knowledge acquisition (guideline introduction and uptake),
ii) agreement and alignment of goals,
iii) team goals and supervision, and
iv) guideline assurance

(these elements are described below).

RHS's play a central role in implementing the guideline in municipalities. Guideline implementation within the RHS must precede, to take on this role successfully.

This study focuses on the feasibility and effectiveness of the DIS for implementation of the guideline in RHS's. It was hypothesized that the DIS would be feasible and effective for RHS's to enhance use of a guideline for ILHP. To examine this, the DIS was pilot tested simultaneously in two RHS organizations and compared with two other RHS organizations that did not receive a predefined strategy for implementing the guideline.

Research question

The feasibility and effectiveness of the DIS was explored by addressing the main research question, i.e: Which (if any) of the four building blocks of the predefined strategy are feasible, and to what extent do they enhance implementation of the guideline for integrated local health policies (ILHP) into the workflow of RHS organizations? The evaluation framework of Nutbeam [5] was used for selection of the outcome criteria (see Methods).

5.1.1 Generation of the building blocks into a draft implementation strategy (DIS)
The following building blocks for the DIS were identified in a previous study [4], which included literature - and field research (interviews).

On the level of the individual (intended) users, diffusion and dissemination theories indicate the following important determinants: professionals' knowledge and attitudes [6], perceived (dis)advantage of use, self-efficacy [7,8], professional views and beliefs [9] and social influence. [10,11] 'Self-efficacy' refers to a professional's faith in his/her ability to perform certain tasks. Therefore, **building block 1** of the DIS focuses on knowlegde acquisition (the introduction and uptake) of the guideline by RHS professionals.

Harmonization of ambitions and goals at all levels (corporate, team, and individual), as well as cooperating leadership, are conditional for successful task performance. These concepts stress the importance of alignment between management and operational executive levels to reach organizational goals [12,13,14] and constitute **building block 2**.

With regard to guideline implementation in public health policy, we used Weick's concept of 'Sense making' and Hoppe's political policy theory. Sense making is understood as the process by which people add meaning to what they experience. Weick's theory shows how people establish reality by interpreting a problem through what they see and experience in interaction with others. [15] Developing ILHP in a political and administrative context is a social process that is mainly characterized by solving practical problems, while considering the perspectives and interests of partner organizations in a policy network. [5,16] To facilitate this process, RHS professionals require a learning environment to improve their knowledge and competences (task performance). This environment includes coaching (e.g. by participating team leaders) [17] and peer supervision to develop the desired networking and social management skills. [18,19] Therefore, **building block 3** of our DIS is aimed at these learning-oriented preconditions for implementation.

Regarding assurance of guideline use in the RHS, we used theories/research on organizational conditions that support implementation of innovations. [20] Implementation is more effective if the guideline is matched with professionals' current working methods and is incorporated in RHS training/ educational programs. [21] With **building block 4**, the DIS

aims at integrating and securing the (purpose of the) guideline at crucial decision-making levels of the RHS partner organizations and within the RHS quality management. [22]

5.1.2 The implementation strategy (DIS)

The field research of the previous study included interviews with i) RHS managers and professionals in health policy practice, and ii) public health experts outside the RHS. The results of these interviews showed, for instance, that clarity on RHS goals, sharing knowledge between colleagues on methods/tools for municipal advisory, the significance of central guideline perspectives for the RHS, and coaching or training facilities, were considered important constituents for guideline use. [23] These findings were also included in the DIS (table 1).

Table 1 Details of the draft implementation strategy.

Building blocks	Implementation actions	Implementation goals
1. Knowlegde acquisition (introduction and uptake)	1. Project leader invites RHS professionals to explore the guideline's content: mastering the guideline; 2. RHS health promoters, policy officers, and team leaders inform civil servants about the guideline's content and purpose.	All RHS health promotion professionals (manager, team leader, executives) know the guideline and understand its content and purpose.
2. Agreement and alignment	3. Project leader puts the guideline on the agenda of management to connect the guideline's perspectives on integrated local health policy with RHS perspectives; 4. Project leader, health promoters, policy officers and team leaders formulate facilitating conditions for use of the guideline's methods; 5. Project leader and policy officers invite managers to respond to the proposed requirements and set agreements on coaching and trial period for guideline use.	All RHS health promotion professionals acknowledge the guideline's purpose and significance; Goals for integrated local health policy are set and made clear between manager, team leader and executives; Team leaders, policy officers and health promoters agree to use the guideline.
3. Team goals and supervision	6. Project leader encourages teams to formulate guideline ambitions; 7. Guideline-based team ambitions: tasks and individual goals are derived from team ambitions; 8. Teams evaluate guideline-related tasks by peer supervision and by individual coaching.	Team leaders, policy officers and health promoters consider themselves capable and perform guideline-related tasks; A learning environment for guideline application is created.
4. Assurance	9. Project leader evaluates implementation results and discusses solutions for experienced barriers with RHS teams, civil servants, and RHS management; 10. Project leader discusses integration of the guideline in the RHS quality management system.	Guideline methods are linked to existing RHS working methods; Guideline methods are included in training and professionals' performance appraisal system.

5.2 Materials and Methods

The two RHS project leaders introduced and conducted the DIS in their own organization: policy officers and health promoters were the intended users of the guideline. The pilot was planned to last for a period of 24 months. To evaluate the feasibility of the DIS for guideline implementation, the strategy applied in the two pilot RHS's was evaluated and results were compared with methods for ILHP in the two RHS's that operated without the DIS, i.e., they conducted their own policies as usual.

5.2.1 Selection of RHS's

The selection of the two pilot RHS's was based on similarity of the following organizational features: both provided services for multiple independent municipalities; had a similar financial governance; had a health promotion department that collaborated with a university; had a R&D unit with epidemiologists, policy officers and health promoters; involved professional and managerial disciplines in municipal health policy and implementation of health promotion; also, they focused on improvement of the policy process for ILHP; and were willing to implement the guideline.

The two pilot RHS's (RHS regions 1 and 2) that were exposed to the DIS were compared with two RHS's (RHS regions 3 and 4) that were not exposed to the DIS. RHS 3 and 4 were also regional health services for multiple municipalities, had a similar profile, collaborated with universities and also focused on improvement of the quality of their municipal advisory concerning ILHP. Before the pilot started, RHS 3 announced their intention to use the guideline as an advisory tool for ILHP, whereas RHS 4 explicitly stated they did not intend to use the guideline for promoting ILHP. We considered these divergent positions interesting for analysis of the pilot results. For example, if RHS 3 and/or 4 used implementation actions for ILHP that are similar to or different from the DIS, this could support or complement the building blocks and yield additional information for improvement of the DIS.

5.2.2 Facilitating the draft implementation strategy in the two pilot RHS's

The Draft Implementation Strategy was developed by the research team in close collaboration with the two pilot RHS's as described in Kuunders et al. [4]. Therefore, the pilot RHS's were already familiar with the DIS to some extent. To further facilitate the execution of the DIS in the two pilot RHS's some extra activities were undertaken. First, in the selection of the pilot RHS's it was provided that the RHS's selected were willing to implement the guideline. Second, to facilitate the execution of the DIS the pilot RHS's' managers were asked to assign a specific internal project leader who was responsible for the execution of the DIS within the organization. The project leader was assigned (8 h/week) extra time for this task. A description of the DIS was handed over to the project leaders in print. A main part of the DIS was that project leaders implement the guideline in the way that suited the organization best and fits the organizational context in the real-life setting. Third, the first author (TK) planned several (3-4/year) consultations with the project leaders about how the organization proceeded with the planned implementation of the DIS, its building blocks and related activities. Besides, the organization could ask for additional external advice if they felt a need for this. This additional support however, was provided on their own expenses.

5.2.3 *Evaluation framework*

Based on Nutbeam [4], we developed and applied a basic framework to evaluate the implementation activities in RHS 1 and 2. This framework involved four main aspects: i) program integrity (Was the DIS applied as intended?), ii) program reach (How many people were exposed to the DIS?), iii) program acceptability (Was the DIS accepted by the target group and stakeholders?), and iv) observed change (Did attitudes and beliefs about guideline use change as intended?). [24]

5.2.4 *Respondents*

The target groups for the DIS were RHS policy officers, health promoters, team leaders and/or managers as facilitators for guideline implementation. In the two pilot RHS's (RHS 1/2), the DIS was evaluated in a qualitative way by means of semi-structured individual and group interviews: 8 individual interviews and 4 multidisciplinary group interviews (with in total 9 persons) were conducted. Interview topics with project leaders referred to the planned actions and their role in the performance of these actions, with emphasis on 'program integrity' and 'program reach'. Interview topics (individual/ group interviews) in the intended user group (RHS health promoters, policy officers, epidemiologists and team leaders) addressed questions about experiences with the four building blocks, and focused on 'program acceptability' and 'observed change' of managerial and professional beliefs/ attitudes towards guideline implementation. The two RHS's outside the pilot regions (RHS 3/4) were evaluated by means of two separate multidisciplinary (semi-structured) group interviews (n=8). In RHS 3 and 4, a group interview was held to explore their specific (RHS) methods for enhancing and implementing ILHP. In both these RHS's, participants were policy officers, health promoters and managers.

5.2.5 *Outcome measures for effective implementation of the guideline for ILHP*

In RHS 1 and 2, effectiveness of guideline implementation is defined as achievement of implementation goals and actions as planned by the DIS (table 1). The extent to which goals have been achieved is expressed by Nutbeam's evaluation criteria for integrity, reach, acceptability, and change.

5.2.6 *Outcome measures for RHS 3 and 4*

Interview topics aimed at the establishment of their advisory role for ILHP, and at their perspectives on implementation of the Healthy Community Guideline. For the components of the building blocks of the DIS, we examined similarities/ differences between the pilot RHS 1/2 (with DIS) and RHS 3/4 (with no predefined policies). These components concerned: i) Knowledge acquisition (guideline uptake) (building block 1), ii) the extent of alignment of ILHP ambitions and goals between RHS managers, team leaders, policy officers and health promoters (building block 2), and iii) the presence of supervision and coaching for implementation of the instruments for ILHP (building block 3). In addition, factors that determined effective implementation or non-implementation of the guideline within their RHS workflow could provide insights for evaluation of our DIS. For example, RHS 3/4 might have used components similar to our building blocks but without listing them as such. On the other hand, RHS 3/4 might provide different approaches to ILHP that have some significance for our DIS.

5.2.7 Data collection and analysis

In RHS 1 and 2, interview data included face-to-face individual and group interviews. Telephone interviews were held with two civil servants involved in the pilot implementation of RHS 2. We also used logs of the implementation process provided by the project leaders, and reports of section meetings from management, policy officers and health promoters that contained information (experiences, clues) on the implementation process of the guideline. In RHS 3/4, data were collected via two group interviews. Questions for the group interviews of RHS 3/4 included, e.g. 'How have professionals and managers taken notice of the guideline?' 'How have professionals and managers assessed the significance of the guideline?' (Building block 1); 'What role did managers and/or team leaders have in the implementation of guideline/methods for ILHP?' (Building blocks 2 and 3); 'Can you describe the decision-making process of the RHS on guideline implementation?' 'Did the RHS facilitate guideline implementation by professionals and which disciplines were involved?' (Building block 4). Finally, respondents in RHS 3 and 4 were informed about the DIS and were asked to give their opinion/ideas on its feasibility for their own RHS's.

After participants had provided informed consent, all interviews were tape recorded and subsequently fully transcribed. The respondents' statements and experiences were coded and analyzed manually, based on the interview topics derived from the evaluation framework and the building blocks of the DIS; then, all statements were grouped based on their content. [25]

Prior to participation in the interviews, respondents were informed that all contributions would be anonymized, and results would not be traceable to individuals or individual organizations. No ethical approval from a medical ethics committee was required as this study was not subject to the Medical Research Involving Human Subjects Act in the Netherlands.

5.3 Main Findings

Findings related to the building blocks of the DIS in RHS 1 and 2 are presented in table 2. Below, we first describe the main results from the implementation process, with reference to the building blocks of the DIS. The findings are illustrated with quotes from evaluation interviews in both RHS's. Then, results are presented of the interviews with RHS 3 and 4. Their methods for implementation of ILHP are compared with the results of the pilot implementations. Finally, we describe similarities and differences between the applied practices and the DIS.

5.3.1 Evaluation of the DIS in RHS 1 and 2

Program integrity

With regard to building block 1 (knowlegde acquisition) of the DIS, both RHS performed the planned actions. During execution of building block 2 (agreement and alignment), RHS 2 adjusted the program by appointing a second project leader for additional support, and the initial manager was temporarily replaced by a colleague who was not familiar with the pilot. These changes delayed the execution of the DIS within their RHS. The deputy manager decided not to discuss alignment of guideline goals due to other urgent activities. In both RHS's, project leaders and policy officers formulated facilitating conditions for

guideline use, which were discussed with managers in RHS 1 and postponed in RHS 2. For the execution of building block 3 (team goals and supervision), the project leaders in RHS 1 and 2 chose different approaches. In RHS 1, evaluation of guideline-related tasks was carried out only in general section meetings and on an individual basis, due to the absence of regular peer supervision. RHS 2 evaluated guideline-related tasks in section meetings and in multidisciplinary teams. In line with building block 4 of the DIS, the project leaders evaluated the planned activities with coordinators of professional groups (health promoters, policy officers, epidemiologists) and both RHS addressed quality officials for assurance of the guideline in their quality management system.

Concerning overall integrity, the DIS was carried out as planned in both RHS 1 and 2, but deviated on certain points. The appointment of a second project leader and deputy manager delayed the process in RHS 2. In both RHS's the status and importance of the guideline for policy objectives were not discussed as planned, and supervision facilities were not clearly established.

Program reach

In the knowledge acquisition phase (introduction and uptake) of the DIS, RHS 1 reached 82 stakeholders (including representatives of partner organizations for the concept map and 19 civil servants) and RHS 2 reached 41 stakeholders (including 20 civil servants). In RHS 1, involvement of RHS units outside Health Promotion (Youth Healthcare; Infectious Disease Control) was limited to knowledge exchange on the purpose of the guideline. In both RHS's, no other RHS units were involved in the subsequent alignment of guideline goals with RHS goals for ILHP.

For building block 2, 'agreement and alignment' (of goals), the project leader in RHS 1 used individual consultations with 6 health promoters and 3 (of 8) policy officers to formulate goals for implementation of ILHP. Project leaders of RHS 2 conducted an internal survey among all health promoters, epidemiologists, policy officers and the manager initially involved, to define implementation goals.

For building block 3, 'team goals and supervision', in both RHS's, managers were informed about facilitating conditions (e.g. a trial period) for guideline use by the project leaders. In RHS 1, all (20) team leaders were informed about the guideline's purpose and 3 team leaders were involved through consultation in evaluation of guideline use. Health Promotion staff of RHS 2 included multidisciplinary teams instead of team leaders.

For the purpose of building block 4, 'assurance', in both RHS's, quality management assistants received updates on the implementation process from the project leaders, and were consulted to provide practical links between current policy instruments, work instruction tools and the guideline for ILHP. Overall reach was in line with the targets of the DIS in RHS 2. In RHS 1, the initial targets aimed at external parties were postponed until internal implementation goals were achieved.

Program acceptability

Regarding guideline introduction and uptake, in RHS 1 most health promoters found the project leader's instructions for the guideline useful. They also welcomed the practical usability of the guideline's examples for execution of health promotion interventions. Four (of 8) policy officers were not willing to accept the guideline as a preferred tool for municipal advisory; their reluctance was due to the lack of clear RHS goals for ILHP.

(Quote: policy officer RHS 1: 'As an independent health organization (RHS) you need to have main goals. You should stand for specific themes. This is not the case, in my opinion').

The same 4 policy officers found explicit guideline use incompatible with a demand-driven approach to municipalities. The other 4 policy officers in RHS 1 confirmed the value of the guideline and agreed with setting common ILHP aims. Policy officers in RHS 2 considered internal guideline implementation important, but also stressed its relevance for municipalities. Their acceptance of the guideline and focus on external implementation was partly due to the fact that RHS 2 had made contributions to the guideline's content.

With reference to 'agreement and alignment', in both RHS's the guideline was viewed as a professional standard for developing ILHP. However, managers considered its actual use to be primarily an autonomous professional responsibility. Management in both RHS's would not accept a role in directing professionals, based on the guideline.

Regarding building block 3, encouragement to translate guideline goals into team goals for ILHP was considered a team leader's responsibility by the board of RHS 1. However, team leaders did not confirm this task because they considered themselves responsible for management control and were insufficiently familiar with the main issues of ILHP.

For building block 4, RHS quality assistants and epidemiologists were prepared to support the uptake of the guideline into the RHS knowledge management systems.

Program acceptance as a whole was not sufficient to achieve the targets of the DIS in building blocks 2 and 3 for both RHS's. The perceptions of managers and professionals on task responsibilities for guideline implementation were not in line.

Change

The dissemination of knowledge of the guideline in the introduction phase led to increased use in RHS 1 (especially among health promoters), and in RHS 2 among health promoters and policy officers. RHS 2 reported guideline use by civil servants for public health departments of two urban communities after its introduction in civil servant meetings, and after recommendations made by RHS policy officers. The concept map meeting in RHS 1 yielded implementation targets for both the RHS and partner organizations. [23] However, RHS 1 prioritized internal implementation of the guideline, whereby no further appeal was made for external support for implementation goals.

Regarding building block 2, alignment of guideline goals among managers, team leaders and professionals was discussed, but not actually reached. Therefore, this building block did not lead to common or widely supported agreements in either of the RHS's, and no

changes were achieved in attitudes/beliefs about the guideline's goals. Although the RHS director and managers in RHS 1 viewed the guideline as a standard for ILHP, an explicit connection between guideline goals and concrete policy advice was not achieved at organizational level.

(Quote: manager RHS 1: 'I think we (managers) lack that shared ambition, and we haven't set the frames for common policy goals').

In RHS 2, the health promotion manager confirmed guideline relevance for the RHS advisory on a large scale. However, responsibility for actual use was also considered a matter for the individual professional. In addition, a majority of policy officers in RHS 2 reported that their current RHS methods already corresponded with the guideline's main objectives. In contrast with RHS 1, all policy officers in RHS 2 showed easier acceptance of the guideline. RHS 2 reported that one individual health promoter had made extensive use of the guideline to develop an obesity prevention plan.

In both RHS's, internal organizational changes were considered a hindrance for guideline uptake by all RHS departments. At the time of the implementation, because RHS 1 expected a change of management and a redesign of teams, decisions on more comprehensive policies were postponed. In RHS 2, current issues of the youth healthcare department outvoted paying attention to guideline uptake.

Both RHS's experienced a lack of attention for important issues related to integrated local health on an organizational level. Internal RHS policies were dominated by management and control issues. In both RHS's, managers of the health promotion department saw no opportunity to discuss guideline goals with Youth and Infections departments. Municipal reorganizations (e.g. of Youth Health services) forced RHS's to remain fully alert to preserving current services within this field of care.

(Quote: manager RHS 2: 'You know, you have to look very carefully what the guideline has to offer for the Youth and General Health departments. At the moment, they see no need to work with the guideline').

Concerning building block 3, setting team goals and the creation of a learning environment were carried out on an individual basis, (e.g. the project leader supervised the health promoters) and did not lead to structural adjustments for training programs or peer supervision. According to policy officers in RHS 1, collaboration between policy officers, epidemiologist and team leaders could help to strengthen relationships with civil servants and aldermen. However, when they were asked, policy officers did not confirm the need for additional training or coaching to use the guideline as a team. In RHS 1, guideline recommendations for integrated health were acknowledged by managers, but did not lead to formulating specific skills for an advisory on ILHP.

(Quote: project leader RHS 1: 'Policy officers mostly work by themselves; there is no cross-policy process for integrated local health and advisory').

Regarding building block 4, for both RHS's, linking guideline methods to current methods and RHS quality management system did not succeed at the planned scale. Digital links were established in both RHS's between the guideline and current RHS tools (e.g. 'regional Public Health Status and Forecasts reports'), methods and working instructions

for health policy advisory. However, neither structural training of skills related to guideline use, nor professional education programs for ILHP development, were realized. Both RHS's included the guideline as teaching material in the introduction program for new policy officers, health promoters and epidemiologists. A manager in RHS 1 stated that the best chance to develop an integrated policy is related to the personal commitment and ambitions of the department manager.

(Quote: manager RHS 1: 'Do you know what it is, it's all about ownership! If ownership is not developed, they (managers) will not accept the instrument as something of themselves').

In conclusion, the aim of the DIS to have the guideline acknowledged as the primary management tool by the RHS for ILHP did not produce the desired results.

Table 2 Evaluation (by Nutbeam model) of the draft implementation strategy for integrated local health policy (ILHP) in pilot RHS's

[1] Abbreviations of disciplines: HP (health promoters); PL (project leader); PO (policy officers); EP (epidemiologists; PA (project assistants); TL (team leaders); M (managers); CS (civil servants).

[2] Mental Health; Substance Use; Home Care; Primary Care Consultancy.

Integrity

Building blocks (1-4) and Planned Actions (A-H)	Pilot	
1. Knowledge acquisition (introduction and uptake)	**RHS 1**	**RHS 2**
A. Project leader (PL) invites Regional Health Service (RHS)-professionals to take notice of guideline content.	**A.** PL informed HP[1], PO, M, EP in section meetings on guideline purpose through online presentation of content.	**A.** PL informed HP, PO, M, EP and CS in 2 meetings on guideline purpose by means of ppt. presentation of content.
B. RHS health promoters, policy officers, and team leaders inform civil servants about guideline content and purpose.	**B.** PL conducted a concept map-meeting with CS, HP, PO, TL, and external public health partners [2] for support based implementation targets. PL informed CS in regular CS meeting.	**B.** PL conducted a concept map-meeting with RHS HP, PO, EP, M to discuss guideline implementation targets. PL informed CS in regular CS meeting and local Public Health partners in a separate meeting.
2. Agreement and Alignment (on guideline purpose and goals for RHS (M, PO, EP, HP)		
C. PL puts the guideline on the agenda of RHS management, team leaders' and health promoters' meetings.	**C.** Action carried out as planned.	**C.** HP, EP, PO agenda gave attention to the guideline. No attention on M agenda.
D. PL, health promoters, policy officers and team leaders formulate facilitating conditions for use of guideline methods.	**D.** Action carried out as planned.	**D.** RHS manager appoints a 2nd project leader (PO), to facilitate implementation process.
E. PL and policy officers invite managers to respond to the proposed requirements and set agreements with team leaders and health promoters on coaching and trial period for guideline use.	**E.** Action carried out as planned.	**E.** Initially involved RHS manager is replaced by deputy manager during the implementation process.
3. Team goals and supervision		
F. PL encourages teams to formulate: - guideline-based team ambitions; - tasks and individual goals are derived from team ambitions.	**F.** Action carried out as planned in section meetings and in individual consultations by PL with HP.	**F.** Action carried out as planned in section meetings and by internal RHS survey.
G. Teams (team leader, health promoters and policy officers) evaluate guideline related tasks by peer supervision and by individual coaching.	**G.** Action carried out in HP section. 4 PO evaluated guideline.	**G.** PO, HP, EP evaluated guideline in teams.
4. Assurance		
H. PL evaluates implementation results and discusses solutions for experienced barriers and preconditions for guideline implementation with RHS teams, civil servants, and RHS management.	**H.** Action carried out as planned. PL involved RHS quality manager for uptake of the guideline in standard procedures.	**H.** Action not feasible due to time constraints. PLs needed another 6 months to perform action as planned. PL involved RHS quality manager for uptake of the guideline in standard procedures.

Reach

Building blocks (1-4) and Planned Actions (A-H)	Pilot	
1. Knowledge acquisition (introduction and uptake)	**RHS 1 (N=82)**	**RHS 2 (N=41)**
A. Project leader (PL) invites RHS professionals to take notice of guidelines content.	**A.** HP: 22; PO:8; EP: 1; PA: 9; TL: 20; M: 3	**A.** HP: 13; PO: 3; EP: 4; M: 1
B. RHS health promoters, policy officers, and team leaders inform civil servants about guideline content and purpose.	**B.** 1 CS participated in the concept map meeting. CS: 19	**B.** CS: 20
2. Agreement and Alignment (on guideline purpose and goals for RHS (M, PO, EP, HP)		
C. PL puts the guideline on the agenda of RHS management, team leaders' and health promoters' meetings.	**C.** All sections' (HP, Youth Health Dpt., Infections Dpt.) agendas gave attention to the guideline.	**C.** RHS managers Youth Health and Infections were not involved.
D. PL, health promoters, policy officers and team leaders formulate facilitating conditions for use of guideline methods.	**D.** 3 (of 8) PO's formulate facilitating conditions on behalf of colleagues. HP, TL were involved through consultation.	**D.** All 41 RHS employees were addressed by survey to explore facilitating conditions.
E. PL and policy officers invite managers to respond to the proposed requirements and set agreements with team leaders and health promoters on coaching and trial period for guideline use.	**E.** M was informed on facilitating conditions by PO, and PL.	**E.** Deputy manager HP was notified on pilot goals and activities and on facilitating conditions for guideline implementation by PL.
3. Team goals and supervision		
F. PL encourages teams to formulate: - guideline-based team ambitions; - tasks and individual goals are derived from team ambitions.	**F.** 17 RHS HP and 8 PO were asked to discussed guideline use and team ambitions in section meetings.	**F.** PO, HP chose goals for local health advisory and prevention on individual basis.
G. Teams (team leader, health promoters and policy officers) evaluate guideline related tasks by peer supervision and by individual coaching.	**G.** HP evaluate guideline use in section meetings. No direct involvement of TL in evaluation. All HP, PO, EP were invited for individual coaching at their discretion. Coaching was also offered to teams and individual HP.	**G.** All HP, PO, EP were invited for individual coaching. Coaching was also offered to multi-disciplinary teams.
4. Assurance		
H. PL evaluates implementation results and discusses solutions for experienced barriers and preconditions for guideline implementation with RHS teams, civil servants, and RHS management.	**H.** Sections of PO, HP, M were involved in evaluation.	**H.** EP, PO, HP were involved in evaluation.

Acceptability

Building blocks (1-4) and Planned Actions (A-H)	Pilot	
1. Knowledge acquisition (introduction and uptake)	**RHS 1**	**RHS 2**
A. Project leader (PL) invites RHS professionals to take notice of guidelines content.	**A.** All HP show a positive attitude towards the guideline; 4 PO's think that they will not use the guideline extensively, due to absence of specific RHS policy goals and perceived lack of management support.	**A.** M, PO, EP, HP acknowledge guideline purpose and trust the guidelines' professional quality.
B. RHS health promoters, policy officers, and team leaders inform civil servants about guideline content and purpose.	**B.** The method of concept mapping was well received, taking all participants' perspectives into account. CS view guideline as useful, not as mandatory for RHS or municipality.	**B.** The method of concept mapping clarified application targets for municipal advisory by PO, HP. CS view guideline as useful.
2. Agreement and Alignment (on guideline purpose and goals for RHS (M, PO, EP, HP)		
C. PL puts the guideline on the agenda of RHS management, team leaders' and health promoters' meetings.	**C.** All HP welcome the guidelines structured practical examples and interventions. HP coordinator secures guideline as topic for agenda.	**C.** Deputy M of HP Dept. indicates other urgencies for agenda.
D. PL, health promoters, policy officers and team leaders formulate facilitating conditions for use of guideline methods.	**D.** To decide on its status, M ask PO to clarify consequences of guideline use. Differing opinions among PO on guideline rigor.	**D.** M postponed discussion on facilitating conditions and alignment on guideline goals with RHS policy goals.
E. PL and policy officers invite managers to respond to the proposed requirements and set agreements with team leaders and health promoters on coaching and trial period for guideline use.	**E.** 4 (of 8) PO view alignment of goals for integrated local health as important for guideline use. M. postpones decision on additional time, training, for guideline use. RHS board confirms importance of ILHP, and states this must be addressed by TL.	**E.** Information on conditions for guideline use did not lead to additional interdisciplinary agreements on goals for ILHP.
3. Team goals and supervision		
F. PL encourages teams to formulate: - guideline-based team ambitions; - tasks and individual goals are derived from team ambitions.	**F.** M and TL (except 1 TL) do not provide leadership for reaching substantive goals or ambitions for health topics, nor for guideline use on team- and individual levels.	**F.** PO, HP, EP discussed use with guideline developers.
G. Teams (team leader, health promoters and policy officers) evaluate guideline related tasks by peer supervision and by individual coaching.	**G.** PO majority does not confirm need for additional competences for guideline use. HP discuss issues with guideline use in section meetings and individually with PL.	**G.** In section meetings, HP, PO confirm practical value of guideline recommendations and examples for health promotion interventions. PO, HP perceive current methods as similar to central guideline recommendations, and do not require individual coaching.
4. Assurance		
H. PL evaluates implementation results and discusses solutions for experienced barriers and preconditions for guideline implementation with RHS teams, civil servants, and RHS management.	**H.** RHS quality manager, PO intend to include the guideline in introduction program of new employees. PL finds that overall RHS working instructions are not often used by PO and HP.	**H.** M, PO intend to include the guideline in introduction program of new employees.

Change

Building blocks (1-4) and Planned Actions (A-H)	Pilot	
1. Knowledge acquisition (introduction and uptake)	**RHS 1**	**RHS 2**
A. Project leader (PL) invites RHS professionals to take notice of guidelines content.	**A.** HP, PO, EP, RA, TL, M can find the guideline, understand its purpose. HP acknowledge guideline applicability, and want to tailor interventions for local alignment.	**A.** PO, EP, HP can find the guideline, understand its purpose. 3 EP did not read the content.
B. RHS health promoters, policy officers, and team leaders inform civil servants about guideline content and purpose.	**B.** Specific implementation targets were formulated and prioritized with RHS members and public health partners. CS view guideline as method for RHS professionals, and as not primarily applicable to CS.	**B.** Specific implementation targets for municipalities were formulated and prioritized with RHS members only. 2 CS of municipal Health Dept. read the guideline to obtain ideas for policy development.
2. Agreement and Alignment (on guideline purpose and goals for RHS (M, PO, EP, HP)		
C. PL puts the guideline on the agenda of RHS management, team leaders' and health promoters' meetings.	**C.** HP use guideline interventions and practical examples in execution of health promotion activities. 3 PO's use the guideline for their local advisory.	**C.** EP, PO and HP set targets for use in local policy advisory by internal RHS survey.
D. PL, health promoters, policy officers and team leaders formulate facilitating conditions for use of guideline methods.	**D.** PO awareness of conditions for guideline use. (time; information exchange; peer supervision; training; common goals.)	**D.** Facilitating conditions were not discussed. Individual PO, EP, HP decide to use guideline for interventions and local health policy advisory.
E. PL and policy officers invite managers to respond to the proposed requirements and set agreements with team leaders and health promoters on coaching and trial period for guideline use.	**E.** 1 TL confirms guideline applicability for a regional prevention program and encourages use by the team. M. views guideline as a standard method and recommends use by professionals at their own discretion. No agreement on facilitating conditions for guideline use.	**E.** Initial RHS M. views guideline as a standard instrument and recommends use by professionals at their own discretion. Arrangements on facilitating conditions for guideline use were not made.
3. Team goals and supervision		
F. PL encourages teams to formulate: - guideline-based team ambitions; - tasks and individual goals are derived from team ambitions.	**F.** Formulation of guideline based RHS policy goals and team ambitions did not take place.	**F.** Formulation of guideline based RHS policy goals and team ambitions did not take place. M indicated RHS goals are in accordance with guideline.
G. Teams (team leader, health promoters and policy officers) evaluate guideline related tasks by peer supervision and by individual coaching.	**G.** HP ask guidance from PL to use guidelines' interventions.	**G.** HP, PO use guideline in relation to CS, mention guideline advantages.
4. Assurance		
H. PL evaluates implementation results and discusses solutions for experienced barriers and preconditions for guideline implementation with RHS teams, civil servants, and RHS management.	**H.** Guideline was linked to a toolbox for project based methods and to digital knowledge bases for public health policy. Organizational RHS policy goals were not explicitly linked to, or confronted with guideline goals on ILHP.	**H.** Guideline was linked to existing methods. HP, PO, EP focus on guideline implementation in municipalities. Several CS are informed about the guideline. Organizational RHS policy goals were not explicitly linked to, or confronted with guideline goals on ILHP.

5.3.2 *Methods for ILHP in RHS 3*

In RHS 3/4, we focused on factors that determined implementation or non-implementation of the guideline within the RHS workflow. The main topics were: the establishment of their advisory role for ILHP, and their perspectives on implementation of the guideline. Our main goal was to examine whether RHS 3 and 4 (without a DIS) had used implementation activities similar to or different from the DIS of the pilot RHS's. Their methods for enhancing ILHP might support or complement the building blocks, and yield additional information for enhancement of the DIS.

5.3.2.1 Implementation of methods for ILHP in RHS 3

RHS 3 reported extensive use of the guideline for their advisory on local health policies. This RHS focused on translation of the 'regional Public Health Status and Forecasts reports' [26] into concrete plans and actions for municipalities. For this purpose, interdisciplinary teams (epidemiologists, health promoters, policy officers) jointly wrote operational reports for their municipalities, so that civil servants could derive concrete health promotion programs and actions.

(Quote: manager Health Promotion RHS 3: 'At that time we had the regional Public Health Status and Forecast report as the main stimulator for the whole local health policy process, and the guideline provided a perfect match; that's why it was such a good combination...').

Management of RHS 3 decided to involve 15 RHS employees (policy officers, health promoters, epidemiologists) in the process of writing the municipal reports. With these teams, the HP department aimed at stronger connections between research, practice and policies in order to provide the municipalities with better quality advice.

Prior to this method, RHS management had to decide on the internal budget, as it was anticipated that this process would require considerable time and labor investment. By combining the guideline with regional reports, the health promotion department designed intervention charts (containing regional and local examples) for their own municipalities. In RHS 3, management and professionals had to align their views on ILHP to reach common goals and ambitions. The process was considered necessary to reach a strong position as knowledge provider for municipalities.

(Quote manager RHS 3: 'We ourselves, as management, had the belief: as a knowledge organization for care and health, you're supposed to know this. Otherwise, you can't discuss with municipalities which problems should be addressed and what still needs to be done').

The whole process took 2.5 years. The Health Promotion manager and project leader provided coaching for the professionals involved. The need for coaching was clearly stated by professionals, who experienced some difficulty in writing the reports and in their subsequent advisory tasks. The guideline provided new tools for the RHS to work on ILHP; these tools were used in the intervention charts. Internal alignment between RHS departments of Health Promotion, Youth Health, and General Health, did not receive serious attention. The Youth department focused mainly on executive tasks, and paid less attention to policy development.

5.3.2.2 Comparison between RHS 3 methods and the DIS building blocks

In RHS 3, the strategy's building block 2 ('alignment of the guideline's purpose between management, as a facilitating and steering discipline, and professionals as experienced

practitioners of health policy') and building block 3 ('translation of guideline goals into team goals') were recognized as important preconditions. RHS 3 also stressed the role of close interaction with municipal professionals. The respondents stated that when municipal needs and questions are taken seriously by the RHS, the use of the guideline follows as a logical choice.

(Quote: policy officer RHS 3: 'I can't imagine that one would totally ignore the guideline, this would not be a professional attitude').

In addition, RHS 3 highlights the process-oriented tools of the guideline, which apply health issues within an integrated framework. These tools were considered important for the quality of RHS advisory on ILHP for municipalities.

5.3.2.3 Perspectives on the DIS by RHS 3

RHS 3 respondents viewed the DIS (used in the pilot RHS) as too formal and characterized it as a 'top-down strategy'. They assumed that a formal strategy would fit less well in their working methods, which reflects more bottom-up characteristics. The respondents thought that health promotion professionals and managers have to acknowledge the advantage of the guideline. Management support and facilitating conditions were considered to be preconditions. The respondents also confirmed the importance of clear guidance and commitment from team managers/colleagues during the process of guideline implementation. In addition, the respondents did not perceive the guideline to be very different from their current methods/skills for health policy advisory.

5.3.3 Methods for ILHP in RHS 4

RHS 4 had already stated that the guideline would not be their preferred instrument for ILHP. Their main criticism of the guideline was its exclusive approach to ILHP from a health perspective. The guideline was thoroughly read by policy officers, but substantial connections to current municipal priorities seemed too remote. However, all respondents acknowledged the relevance of the guideline for new colleagues. Experienced policy officers used the guideline mainly for inspiration, or used its background information to prepare for a meeting with the municipality. According to the Health Promotion manager, the strength of the guideline is its completeness. It offers concrete ideas to approach specific health issues. Its weakness lies in its general nature, which fails to meet the various local dynamics of the municipal policies.

5.3.3.1 Implementation of methods for ILHP in RHS 4

However, a major reason for less attention paid to the guideline came from the development of their own regional program for cross-sectional policies within the RHS region. Their program aimed at reaching a political and administrative support base for ILHP at a regional level. The program was already accepted by most of their municipalities (before publication of the guideline) and had started to succeed. With this program, the RHS had made a major effort to create their own instrument for ILHP.

(Quote: manager RHS 4: 'When you look at what works, it's what you have made yourself; it makes you proud when you see that it works, and this inspires you; it's like your own child that makes you feel warm inside').

Nevertheless, professionals in RHS 4 were required to be familiar with the overall content of the guideline, but were not forced to use its tools.

(Quote: manager RHS 4: 'I think that the guideline is one of the tools that must be part of the professionals' knowledge base. Our Head of Department also supports the use of evidence-based knowledge. But, professionals are free to decide what they need for successful job performance. Using the guideline should not be a goal in itself').

5.3.3.2 Comparison between RHS 4 methods and the DIS building blocks

In RHS 4, implementation of their own instrument for ILHP showed the following characteristics. Policy officers, managers and health promoters were involved in the development process of the program. By focusing on local (municipal) debate, all three RHS disciplines reached alignment on goals for ILHP. For this process, the manager encouraged employees to develop the desired communication and relational skills.

Although no specific attention was paid to the guideline, this process in RHS 4 seems (again) largely consistent with the objectives of building blocks 2 and 3 of the DIS. The development and execution of their program for ILHP required internal collaboration between managers, policy officers and health promoters, and collaboration of RHS disciplines with administrative, management and civil servants of municipalities. Building blocks 1 and 4 of the DIS were specifically related to the guideline and, in that sense, are less comparable with the implementation process of the program for ILHP in RHS 4. The program was developed over several years and led to gradual changes in the quality management system and in the professional competences required.

5.3.3.3 Perspectives on the DIS by RHS 4

RHS 4 respondents confirm the relevance of close interaction on goals/ambitions between RHS disciplines, but see the interactions with the municipalities as equally important. Opinions differ regarding a targeted strategy for guideline implementation. Policy officers confirm the value of the guideline, especially for beginners in the field of health policy advisory. However, a more experienced policy officer rejected imposed usage:

(Quote policy officer RHS 4: 'I would feel very uncomfortable if my team leader forced me to use the guideline; I would think: that's easy for you to say, but local circumstances confront me with other issues, which I need to connect to by other means').

The manager states that the use of evidence-based knowledge and tools remains important for the quality of RHS services.

(Quote: manager RHS 4: 'But to use the right models and the best practices, I would say that is preconditional, isn't it?').

5.4 Discussion

The main objective of the present study was to examine the feasibility and effectiveness of four building blocks of a draft implementation strategy DIS. It was hypothesized that the DIS would be feasible and effective to enhance implementation of a guideline for an integrated local health policy by a Regional Health Service. The purpose of the guideline was to improve the use of evidence-based knowledge for ILHP by Regional Health Services

and the municipalities in their region. Our primary focus concerned implementation of the guideline into the workflow of RHS organizations.

5.4.1 Feasibility of the building blocks of the DIS in the pilot RHS's

With regard to the impact of the DIS on guideline use, we address the following aspects of the internal/external validity of the program (the building blocks). The main questions (in line with Nutbeam's evaluation model) are: 1. Can the results be attributed to the DIS (internal validity)? 2. Why were some of the desired results (not) achieved? 3. Can we define the most active program elements of the DIS (effect explanation)? 4. Would it be possible to implement the strategy in another (real-life) RHS setting (applicability)? Would the strategy yield similar results in other (real-life) RHS settings (external validity)? [24]

5.4.2 Results that can be attributed to the DIS

Evaluation of the building blocks of the DIS showed different results in RHS 1 and 2 regarding the introduction and uptake phase of the guideline. Not all policy officers in RHS 1 were prepared to accept the guideline as a method for municipal advisory, while RHS 2 health promotion professionals and their initial manager showed overall adoption. RHS 1 health promoters accepted the guideline more easily due to its practical applicability for the planning of preventive interventions; this result can be attributed to the DIS. In both RHS's, health promoters who joined the introduction of the guideline and who received coaching for specific guideline use were positive about the information and the implementation support. Some policy officers in RHS 1 perceived the guideline's tools for developing ILHP (e.g. checklists) as being too complex and, therefore, as less ready-made for their advisory task. For these policy officers, mastering skills for municipal advisory on ILHP was not a priority, partly because they had not studied the guideline, but mainly because they felt a lack of managerial commitment to ILHP goals. On the other hand, overall, policy officers had a high margin of discretion, which may have complicated their acceptation of the guideline. [27]

In RHS 2, teams of policy officers, epidemiologists and health promoters focused on guideline use by civil servants. Prior to this focus, the teams had already acknowledged the advantages of guideline use. This result (acceptance) was partly due to contributions to the guideline's content by their own RHS (such as: examples for ILHP approach). Within the teams, goals for policy advisory and goals for guideline use were discussed. Therefore, for RHS 2, the estimated impact of the DIS on the acceptance of the guideline is biased. However, despite their involvement in the development of the guideline, the attempts of the project leaders to extend support for the guideline to other RHS departments were not successful.

5.4.3 Reasons for (non-)achievement of desired results

The desired effect of building blocks 2 and 3, alignment of goals between the main RHS departments (Health Promotion, Youth Healthcare, Infectious Diseases) and executive disciplines, was not reached in the pilot RHS's. To expect a change at RHS management level regarding acceptance of the guideline's goals for ILHP, seems to have been too high an ambition for the DIS.

Nevertheless, the building blocks 2 and 3 for the alignment of goals appear to include significant elements for adoption of the guideline. Although the alignment of goals for

ILHP between organizational and operational levels did not succeed in the pilot RHS's, similar elements to building blocks 2 and 3 seemed to have worked for this alignment in RHS 3 and 4. These elements concerned the multidisciplinary process of common goal setting for municipal policy advisory in the RHS, reaching commitment to team goals, and creating a learning environment in which coaching of professionals proved an essential facilitating condition. This observation calls for consideration of possible reasons why building blocks 2 and 3 yielded less success in the pilot RHS's. This might be because the preparation among RHS managers/policy officers for broad acceptance of the pilot implementation in the two RHS's was insufficient. Support for implementation was assumed based on the commitment of the two RHS managers and their estimation of the internal need for RHS professionals' guidance for ILHP. In contrast, RHS 3 (respondents in the comparison) described a broad, multidisciplinary support base and preparation prior to the introduction and uptake of the guideline in their organization. Professionals and managers (team leaders) were eager to use the guideline and had clear expectations on how the innovation could help them improve their health services. This type of anticipation was not found in the pilot RHS's. However, executive health promoters in both pilot RHS's showed stronger acceptance of the guideline. This indicates that elements of building block 1 (e.g. providing knowledge) influenced (to some extent) acceptability of building blocks 2 and 3 for health promoters. For instance, on an executive level, the guideline offered clear examples/instructions for planned health interventions. Alignment of goals with health promoters contributed to their knowledge and to their perceived advantage of guideline use. Although these single findings are insufficient for inductive inference, implementation efforts for the guideline regarding practical interventions at an executive level seem to be more successful elements of an implementation strategy than efforts to influence (or change) the RHS policy-oriented approaches at an organizational level.

In RHS 1, the unsatisfactory results in guideline uptake for policy approaches might be due to differing perceptions on task responsibilities among managers, team leaders and policy makers. In the execution of planned actions for building blocks 2 and 3, most team leaders and managers in RHS 1 viewed guideline use as a professional's responsibility. The manager who was initially involved in RHS 2 also thought that professionals should use tools that best suited their jobs. Despite the apparent reasonableness (referring to principles of professional autonomy), these positions also reveal a certain disorientation at an organizational level in terms of disconnection between management and operational disciplines for substantive orientation on ILHP. Due to this disconnection, some policy officers in RHS 1 experienced lack of guidance on common RHS aims for ILHP. This call for 'the right direction' was not addressed by managers. Subsequently, the uncertainty about major RHS aims resulted in professionals doubting the feasibility of guideline goals for ILHP. The management theory of Lawler [28], as well as the views of Mintzberg [12] and Weggeman [13,14], addresses possible solutions for the problem of 'disharmony' regarding substantive direction in knowledge organizations and attribute an important key role to collaborating team leaders as liaison officers between management and executive disciplines.

Other reasons for non-achievement of the goals in building blocks 2 and 3 are based on the criticisms of the DIS reported by RHS 3 and 4. The respondents mentioned the problem of implementation by means of a more or less imposed (top-down) approach. Although we used a participative approach (concept mapping in building block 1) to reach shared

implementation targets for the guideline, our DIS might have been too prescriptive to fit in with the current organizational workflows of the pilot RHS's. In this respect, the ambition of the DIS was too high. If this was a pitfall of the DIS, a solution for future attempts could be to place more emphasis on the adoption phase through application of methods such as concept mapping (for goal identification among the various disciplines involved), and methods for analysis of specific targets/ hindrances to reach support-based adoption of an innovation (e.g. the Concerns Based Adoption Model [29]). Recent research highlighted the need for additional research into effective dissemination instructions and tools for local guideline implementation in public health, with specific emphasis on identification of organizational factors to meet the needs of individual participants, organizations and knowledge providers. [30,31,32,33]

5.4.4 Defining the most active elements of the DIS

Knowledge exchange on the guideline's purpose and content, and support for guideline use for health promoters, showed the desired effect.

In the comparisons, both RHS 3 and 4 stressed the importance of interdisciplinary collaboration to address policy change for ILHP. In these RHS's, effective elements mentioned by respondents correspond to building blocks 2 and 3 of the DIS; however, the desired effects of these building blocks did not occur in the pilots. Therefore, we cannot claim that building blocks 3 and 4 are essential in the applied DIS. Nevertheless, these elements appear to have some significance for successful implementation of the guideline in RHS's, e.g. RHS 3 and 4 criticized the top-down character of the DIS, which would not fit into their horizontal communication structures.

This criticism may be an indication for modifying the sequence of phases in the DIS. To achieve a better effect, the position of building blocks 2 and 3 in the strategy would have to be at the beginning, so that more emphasis can be placed on preconditions for broad adoption of the guideline and its central purpose of integrated local health policies. At this point we refer to Hall's change principle: 'Although both top-down and bottom-up change can work, a horizontal perspective is best'. [34] Support for this principle is also found in the 'Replicating effective programs framework' for health care interventions. [35]

5.4.5 Applicability of the strategy in another (real-life) RHS setting

As the applied strategy does not seem promising for effective implementation in other RHS's, the external validity of the DIS seems limited. In a modified sequence, as discussed, the building blocks may have a better chance to match individual RHS conditions. To determine opportunities for the implementation of the guideline and select a suitable approach, a preliminary assessment of the RHS communications infrastructure is necessary. This assessment could indicate at which level in the RHS organization (executive, middle or higher management) implementation activities should be addressed, and on what scale changes can be expected. [28]

5.5 Limitations

The choice of a trial implementation in two RHS's and the design for comparison with two other RHS's has provided few insights; therefore, the results cannot be generalized and no external validity can be claimed. By focusing on the RHS internal organizations, we selected activities in our DIS that seek solutions for adoption/implementation problems on an individual level of employees and single organizations. The needs of external stakeholders were addressed at the start of the pilots, but were not included in the subsequent execution of the implementation program. The inclusion of external perspectives could have influenced the required RHS perspectives on ILHP and might have affected the results of the DIS. Although this question remains unanswered, it is relevant for implementation of the guideline. Further exploration of conditions for successful implementation should take these external perspectives into account.

5.6 Conclusion

This study shows that, if the methods used by RHS's for integrated local health policy are to be effective, they require the strong commitment of the various stakeholders involved. The DIS for an ILHP guideline, as applied in this study, seems to have missed its potential effectiveness due to an unsuccessful match with current organizational levels of decision-making. RHS's need to know the concerns of their municipalities. However, as a professional municipal contractor, the RHS board and management have to make substantiated choices for organizational goals on ILHP. This study indicates the relevance of agreement and alignment on organizational goals, and of an engaged leadership to support professional operationalization of these goals, as vital components of a final implementation strategy. In the attempt to enhance guideline use for ILHP, professional autonomy and solid managerial directives from collective goals or aspirations should not present any contradictions in the RHS organization. Collective goals for ILHP, when including the perspectives of municipal and public health partners, can provide an important basis for RHS commitment at all desired levels. [23,36]

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Chapter 6

General discussion

Chapter 6

General discussion

6.1 The present thesis

The Dutch Ministry of Health, Welfare and Sport and the Health Inspectorate strive to improve public health promotion and the quality and effectiveness of municipal health policy on a national level. For this purpose, municipalities and Regional Health Services received guidelines with evidence-based knowledge and interventions aiming at the collective prevention of smoking, alcohol, depression, obesity, unhealthy sexual behavior and injury. These guidelines support a systematic approach to health promotion and an integrated approach to local health policy. Formally, the Ministry emphasizes the importance of 'financial and substantive efficiency and a compact knowledge and research structure' for health policy and health promotion. As a starting point, the Ministry states that scientific and promising or substantiated knowledge should find its way better to the practice of health policy and promotion. In addition, the Ministry urges local authorities and health organizations not to 'reinvent the wheel again and again'. (VWS, Landelijke Nota: Gezondheid Dichtbij. sept. 2011, p. 69,70)[a] (references list)

However, the separate guidelines were used to a limited extent by both municipalities and Regional Health Services (RHS's) because they lacked information about the effectiveness of the recommended interventions and examples of an integrated approach with a clear division of roles between parties in health promotion. (RIVM, van Dijk, 2009)[b] To meet these needs, the separate guidelines were brought together into one comprehensive guideline, called the 'Healthy Community Guideline' (hereafter: 'guideline') and supplemented with information, tools and practical insights on process factors for integrated municipal health policy.

The success and failure of the implementation of innovations, however, is determined not only by its intrinsic quality characteristics, but also by different pragmatic and contextual factors. The lack of an effective implementation strategy for the guideline that was attuned to these pragmatic and contextual factors was the direct reason for this research.

So far, insight into implementation strategies which improve integrated public health policy is scarce. This research was therefore aimed at finding building blocks for an effective implementation strategy for the guideline.

The purpose of this thesis was twofold:

1. Enhance insight into the 'black box' of factors and processes that affect the implementation of the guideline in RHS practice.
2. Provide an overview of building blocks for an effective implementation strategy of the guideline, with focus on the RHS as knowledge supplier and appointed advisor for integrated local health policy.

This thesis contains two main parts:

In part 1, based on theory and practice, we went into the details of the building blocks for designing an effective implementation strategy for the guideline and their generalizability. First, theoretical insights were gathered from implementation literature and were supplemented with promoting and obstructing factors for implementation of the guideline derived from interviews in Dutch public health practice. Subsequently, through a national web survey among all Dutch RHS's, we explored the generalizability of these building blocks.

In part 2, we applied the draft strategy (building blocks) for implementation of the guideline in two RHS organizations.

First, 2 RHS's, partner organizations, and guideline developers were interviewed about their perceived characteristics of 'successful guideline implementation'. The next phase involved an evaluation study of a trial implementation of the draft implementation strategy in 2 RHS's in practice.

Chapters 2 to 5 describe the theoretical framework for this research (2), the national survey with regard to determinants for guideline implementation (3), the concept mapping meetings for the pilot RHS's (4), and the evaluation of the pilot implementations in the RHS practice (5). Finally, this chapter (6) discusses the main findings of the thesis and summarizes the strengths, limitations and implications for future research, policy and practice.

6.2 Main findings

Part 1: Developing the draft implementation strategy

6.2.1 Findings from implementation theories

The main insights from implementation literature were derived from empirical research and theory about the diffusion of innovations [1,2] and were supplemented by insights from policy and management theory in knowledge organizations. Specific determinants for guideline implementation in the RHS organization were explained basically from a social constructivist perspective. [3,4,5] RHS's, municipalities and local public health parties have their own interests, and are at the same time interdependent for successful integrated health policy by taking each other's interests into account. Due to its liaison position (between local authorities and health partners), and as a connecting network organization, the RHS enters into incremental (step-by-step, searching and creative) processes of policy improvement. [6] This position of the RHS requires specific network competen-

cies at different organizational levels. Starting from this social constructivist perspective, a theoretical framework was built with five categories of determinants that could influence the implementation of the guideline positively or negatively: the organization, the intended user, the management, the (implementability of) guideline itself, and the social political environment.

As for the RHS organization, success or failure of implementation efforts depend on the extent to which organizational objectives and ambitions between management and professionals correspond, and correspond with the objectives of the guideline. This requires knowledge exchange of the guideline's content and clear communication (agreement) on its purpose at all organizational levels. [7,14]

For the intended user (RHS and municipal professionals), the willingness to adopt and use the guideline depends on the perceived credibility of the source of that guideline, guideline-related self-efficacy beliefs, individual professional autonomy (policy discretion), social influences and subjective evaluation of the materials. [8,9]

The third category concerns the way in which executive employees (guideline users) are directed and supported by RHS management. We found that 'cooperative leadership' could be suitable for implementation of the guideline. Encouragement, recognition and coaching can enhance teams to build desirable and realistic team ambitions. [10,11,12]

The guideline itself (implementability in terms of procedural clarity, instructions and rules of action) and its perceived added value would also play an important role on both individual and RHS levels of use. This may determine the extent to which the guideline is perceived congruent with existing RHS - and municipal methods. [13]

Finally, the social political environment is constituted by factors such as the availability of resources, complexity of decision-making processes within local politics, communication between municipal sectors, RHS's and public health partners about central concepts (integrated health policy), relationships in existing networks, experiences of earlier collaboration, and perceived local urgency. [14]

6.2.2 Findings from public health practice

In depth interviews with public health professionals and experts revealed as important factors for implementation: knowledge of the guidelines, agreement on ambitions with regard to integrated health policy between executives and management, alignment with the current local political context and networking skills.

A central finding as an impediment to guideline use was the professionals' perceived fragmentation of RHS's departments and the multitude of tasks, the lack of focus in RHS's working methods. Professionals and managers pointed out the lack of coherence in the RHS's range of activities, the need for better coordination for the main health problems of municipalities. Through improved coordination, the separate RHS departments (Infectious Disease, Youth, Health Promotion) would be able to strengthen their focus on the most prevalent regional/local health issues and accordingly provide substantiated advice to municipalities. Coherence in RHS's ambition and activities would enhance clarity in communication at multiple levels and will facilitate guideline use and as a result local integrated health policy.

6.2.3 Building blocks for implementation

From these theoretical and empirical findings, we derived four critical building blocks for designing a draft implementation strategy:

1. Knowledge acquisition (guideline introduction and uptake): RHS health promotion professionals (manager, team leader, executives) should become well informed about the purpose and content of the guideline.
2. Agreement and alignment: RHS health promotion professionals would have to acknowledge the relevance of the guideline's purpose and the significance for their organization. Goals for integrated local health policy have to be made concrete between manager, team leader and executives and communicated with municipalities. And team leaders, policy officers and health promoters of RHS departments have to agree upon using the guideline (at least to some of its central ambitions or instructions).
3. Incorporation of team goals and supervision: team leaders, policy officers and health promoters would have to accept task responsibilities and consider themselves capable of executing these tasks (self-efficacy). A learning environment for guided application should be installed (considering the support from management and coaches).
4. Assurance: monitoring and evaluation of the ongoing implementation process. This will provide feedback for RHS teams, civil servants, and RHS management and targets for adaption and/or improvement of the initial implementation strategy.

6.2.4 Generalizability of the building blocks

Through a web survey, we questioned the general applicability of the building blocks of our draft implementation strategy for guideline use and preconditions for use among all Dutch RHS's. Our findings confirmed the relevance of building blocks that focused on 'knowledge acquisition' (e.g. introduction and uptake of guideline content), 'agreement and alignment' (e.g. shared decision making between managers, policy officers and executive professionals of RHS and municipalities with relation to guideline use or non-use), 'incorporation' (e.g. setting team goals and providing organizational support concerning task responsibility, usability, procedural clarity of the guideline, and training and coaching for guideline use and increased self-efficacy). In addition, with regard to 'assurance', knowledge exchange of the guideline's purpose, translation into ambitions and targets for execution of integrated health policy, appeared to be influential factors for the implementation process.

Part 2: Perspectives on successful guideline implementation and the evaluation of a pilot implementation of the draft strategy for guideline use.

6.2.5 Perceived characteristics of successful implementation

RHS professionals and guideline developers participated in a concept mapping study to explore their perceived characteristics of a successful implementation of the guideline. The RHS professionals' concept maps showed corresponding characteristics regarding the process factors (realization of relationships and coordination with partners and municipalities were considered crucial), whereas guideline developers stressed the visibility of concrete health issues in municipal policy as a most important indicator for a successful implementation of the guideline.

Differences in the characteristics that were linked to successful implementation between the two pilot RHS's were related to the local context and to the level of adoption of the guideline by RHS policy professionals. One RHS focused on internal adoption among managers and professionals, while the other was more externally oriented and stimulated the use of the guideline by municipal policy officials.

The results of the concept maps were supplemented with current theoretical insights into conditions for improving knowledge translation strategies, such as collaborative decision-making, agreement about objectives and goals, local planning and action, effective leadership, availability of resources, and trained and knowledgeable staff. [15,16] The RHS project leaders used these insights in their guidance of the pilot implementations.

6.2.6 Evaluation of pilot implementation of the guideline according to the draft implementation strategy

The draft-implementation strategy was evaluated in two pilot RHS's. The results showed that knowledge exchange through professional meetings improved guideline use by the health promotion professionals. Also, some policy professionals and a team leader with substantive project responsibility showed increased guideline use. However, most RHS policy professionals remained cautious about using the guideline. This caution was partly due to different perceptions on task responsibilities among managers, team leaders and policy makers, and to lack of guidance on common RHS aims for integrated local health. The evaluation also showed that a fixed strategy to implement the guideline did not fully fit with the current organizational workflows of the pilot RHS's. This led to the conclusion that future implementation attempts could benefit from shared decision making about adoption by means of methods such as concept mapping (for goal identification), and by methods generating social support within the organizations' hierarchical structure.

In addition, two control RHS's were studied that were not part of the pilot. One RHS already worked intensively with the guideline, the other used a more or less similar guideline they had developed on their own with focus on regional integrated policy. With regard to integrated health policy, the control RHS's showed more intensive coordination between the hierarchical levels in their organization than the trial-RHS's. Core elements from two building blocks of the trial strategy were also present in the control RHS's and proved to be constructive elements for effective implementation of the intended instruments for integrated health care. Especially building blocks 'agreement and alignment' (coordination of goals for integrated health at all relevant hierarchical levels within the RHS organization and with local partners) and 'team goals and supervision' (deriving goals at team level and group- and individual training on desired competencies) appear to be of significance for implementation.

6.3 Reflections on the main findings

6.3.1 Main findings

The building blocks for the implementation strategy that resulted from theory (implementation-, policy- and organization theory) and from consultations of RHS-professionals reflect current insights into the conditions for effective implementation of guidelines in professional organizations. [17] These are: collaborative decision-making, agreement of objectives and goals, local planning and action, effective leadership, building and maintaining trust. [15]

However, recent implementation studies also draw attention to more context related implementation frameworks. These are characterized as 'intervention plasticity' (the extent to which users can mould an innovation to fit a particular context) and 'contextual elasticity' (the extent to which users can mould elements of the environment to allow a

set of intervention components space to work). [9; p.2-3] Also at national level, the (rather criticized) Dutch Council for Health and Society report 'No evidence without context' pleads a nuance of evidence based healthcare and recommends context-based practice as starting point for dialogue between the specific context of the 'patient' (citizens, communities/neighborhoods, municipalities) and of the environment in which different sources of knowledge are used and decision-making takes place. This means that implementation (of an innovation) always takes place in a specific context, with specific professional abilities and resources, and with its own history. Innovations or policies developed elsewhere can therefore not simply be rolled out, implemented or replicated. [18]

This plead is supported by ongoing international research based on the Normalization Process Theory (NPT), in which contextual factors are not understood as 'sources of obstruction and interference with the smooth delivery of the (implementation) trial', but as a source of core elements for 'generative and self-organising mechanisms' within complex adaptive social systems. In other words, these contextual factors and mechanisms motivate and give structure to individual and collective actions that stem from calls to change. Here, social context is understood as capacity (the social structural resources that individuals and groups possess, including informational and material resources, and social norms and roles) and as potential (the social cognitive resources that they possess, including knowledge and beliefs, individual intentions and shared commitments). These resources are mobilized by individuals and groups when they invest in making sense of (new) practices that are the objects of implementation. [9; p.2-3] A similar conclusion is drawn by de Leeuw (2017), who argues that 'different levels of governance, policy, and action need to be complementary', when integrated health is at stake. [19]

6.3.2 Willingness to adopt and use the guideline; reinventing the wheel is necessary

According to Dutch experts, the guideline cannot be implemented as such, because it doesn't offer strictly defined, step-by-step directives with clear, successive rules or procedure. Their criticism is in line with our findings among public health professionals: 'the guideline lists all relevant themes neatly, but it does not sufficiently clarify how to realize a concrete approach for integrated local health policy'. An actual dilemma for guideline developers is that they would rather view the guideline as a toolbox than as a directive for integrated health policy and promotion. Still, the outcomes of the developers' concept map (6.2.1) show that it remains difficult to avoid the pitfall of obstinacy and a too one-sided approach for integrated policy by starting from health themes perspectives.

The guideline could improve its implementability for RHS professionals by including clear instructions and methods (examples) on processes that contribute to building coalitions in multi-hierarchical systems. On the other hand, guideline developers state that due to the diversity of local conditions, 'there is no fixed recipe' or 'optimal working method' for integrated policy and that the right approach depends on the local situation and possibilities. [20]

From the NPT-perspective, strict rejection by the Dutch Ministry of local inclination to 'reinvent the wheel', as mentioned before, might work counter-productively. Local 'reinvention of the wheel' may be a key element for the process effect that is needed to achieve shared ambitions with various partners who are expected to build common ground for integrated local health policy. [18,21] There is need for a new balance between the use of effective interventions (confidence in what others have already found) and the room for local (own) adjustments. [22]

Contemporary attempts to find this new balance can be found in 'policy game' approaches aiming at facilitating relationships between the stakeholders and stimulating cross-sectoral policymaking. In a simplified version of reality, stakeholders of a wide range of sectors are invited to explore together possible solutions for a pre-defined complex problem concerning public health. This way, the game offers stakeholders an experimental network session in order to stimulate new learning experiences that might influence future actions to be taken in real-life. [23]

6.3.3 Core building blocks for an implementation strategy

Building blocks 'alignment and agreement' (2) and 'incorporation of team goals, coaching and leadership' (3) came forward as critical elements for improvement of guideline use.

Due to the diversity of domains (e.g. organizations) involved in integrated health policy, local implementation of the guideline requires that these domains make their own goals explicit. [24] Flexibility of (guideline) recommendations to the local context enhances implementability of the guideline. [13,25] As mentioned before, the guideline can improve its implementability by incorporating strategies and tools for its main purpose: achieving integrated local health. However, here we run into a problem. With the national decentralization and transfer of government tasks to municipalities, including prevention tasks and health policy development, top-down guideline implementation (by the Ministry and Health Inspectorate) seems contradictory to a widening local policy discretion. Some municipalities are skeptical about structural health policy improvement through mandatory regulations, because they find budgets for development too small or not well distributed between center and peripheral municipalities. Others state that local everyday issues or urgencies interfere too often with structural policy development.

The Dutch research report 'Common sense - Public knowledge organizations in health care' (Rathenau, 2017) concludes that the Ministry should take system responsibility for a well-functioning infrastructure of substantiated knowledge 'in which the content and the strategic agenda must come together'. But at the same time, involved parties also stress that it is unclear what this system responsibility entails. [26; p.43] What does this mean for guideline implementation by the RHS, who are involved in the dissemination of knowledge from (national) public knowledge organizations?

Recent analysis of knowledge utilization in Australian healthcare may point in the right direction to find answers to this question. In a current study, de Leeuw (2017) concludes that within the mainstream of public health scholarship, there has been little attention to the existing science of governance, policy, and implementation instrumentation (the toolbox of government); consequently, a terminology in the health field has emerged and sustained that does not meaningfully distinguish between essential concepts. Joined up governance is not the same as integral policy, which also is not the same as intersectoral action. Governance is not policy nor is it action. [19; p.344]

If we may draw a similar conclusion for the Dutch distinction between concepts of joined up governance, integral policy, and intersectoral action, then 'stakeholder engagement in multiple hierarchical levels' requires not only alignment of goals within organizations (building block 2: managers, team leaders, policy executives), but also between organizations (national and local governance, municipalities, RHS, public health partners, and

citizens). Use, and further development of tools or strategies (such as concept mapping, policy games) seem particularly important because they can counterbalance the resistance we found in this study with regard to top down implementation of the guideline. [27]

6.4 Qualifications of the thesis: strengths and limitations

The specific context of the RHS

The data in this thesis were collected using mixed methods (literature study, survey, concept mapping, interviews, focus groups). That in itself can be considered a major strength. Furthermore, it was executed in the daily public health practice, which also is of great importance to the validity and usability of the findings.

Some weaknesses however, are also connected to this study. The demand for an effective implementation strategy of the guideline in the RHS as a network organization not only concerns determinants at the individual level of professional behavior (managers, team leaders, policy executives, health promoters). The structural improvement of local health policy also requires perspectives of national and local governance, external stakeholders, and citizens in order to find opportunities for prescriptive guideline use in a specific context of collaborating organizations. In this initial exploration, these perspectives have not yet been sufficiently addressed, nor in theory nor in practical data collection.

However, our departure from a hypothetical framework regarding theoretical and practical opportunities and barriers for guideline implementation - as a result of literature and field research - provided a necessary focus for this research. The strength of this focus lies in revealing crucial process factors for effective implementation of the guideline in the RHS organization.

As to the web survey, the low response can be considered a weakness. Although all RHS were represented in the results, there was still a low response to the national survey among policy officers. This low response rate may have resulted in answers more in favorite of guideline use. Looking back, the questionnaire might have been too extensive and might have produced a better response if it had been kept shorter with a focus on a smaller number of theoretical determinants for implementation. For instance, the survey could have included more items on preconditions for intentional guideline use and - adoption, and less on actual use, because some regions were in the mid-term of executing their previously planned strategy (4-year policy cycle). In addition, other stakeholders outside the RHS could have been involved in the survey to explore their perspectives on preconditions for guideline adoption and use by the RHS.

The strength of the concept mapping method lies in its usefulness for the local context. The method contributes to clarification of ideas, to achieving shared ambitions, and to building common ground through agreement on setting priorities. On the other hand, this usefulness in the local context makes the generalizability for implementation of its outcomes low, which is, in this case, a weakness.

The external validity of the draft implementation strategy appears to be limited. The focus of the implementation strategy was on the internal organization of two RHS's. There-

fore, the generalizability of the outcomes for other RHS organizations is low. However, the qualitative outcomes do show recognizable patterns in effective methods of guideline use the in the context of internal cooperation (RHS) and advising municipalities. The pilot results offer useful insights for further elaboration and testing, especially regarding building blocks (2) 'alignment and agreement', and (3) 'incorporation' of team goals, coaching and leadership, which came forward as first indications for successful implementation of a draft implementation strategy.

6.5 Conclusions

Based on the results of this study, it can be concluded that effective implementation of the Healthy Community Guideline in the RHS organization can be enhanced through:

1. agreement and alignment on specific local urgencies of integrated health (multilevel communication on ambitions);
2. and on translation (incorporation) of ambitions into team goals, coaching and leadership, including organizational support through providing capacity, and creating conditions for developing professional competency.

In the RHS's and municipalities, these building blocks seem to deserve more attention in order to achieve effective processes for use of the best available knowledge.

Regarding the latter (incorporation of team goals, coaching and leadership), important elements are clear decision-making, coaching and facilitating leadership, and teamwork to formulate common goals for supporting municipalities. There is sufficient evidence that reports positive effects in job performance when professionals experience organizational support, such as 'providing employees with the resources they need through training, team coaching and information, maintaining open channels of communication, and showing recognition for professional accomplishments'. [28] In order to enhance mutual engagement and facilitate motivation to improve professionals' self-efficacy, and to build confidence in team performance, it seems wise not to neglect a solid middle management motivating leadership in RHS's and municipalities. [12]

Concerning the first building block 'agreement and alignment', the designated health issues of the guideline still pose the greatest threats to national (and local) public health (Alles is Gezondheid, p.7). [35] Therefore, RHS's and local authorities should give priority to the task of achieving common ground for integrated health. This means for the internal RHS organization that managers, team leaders and executive professionals have to maintain short - and open communication lines with each other and with their municipal relations. This task is not straightforward and requires RHS's to properly manage a diversity of interests at all function levels, while still maintaining professional advice and influencing local policy from health perspectives as a core task. In this political administrative environment, effective leadership also plays an important role [29,30], and should be characterized by keeping balance between involved local parties that want to create their own solutions for their experienced problems, and the focus on the use of substantiated (expert) knowledge to address health promotion. This refers to processes in which a critical assessment of the appropriate scale is needed when it comes to actual practical change. Although alignment of goals is sometimes preferably approached on a regional or national scale, smaller

projects for integrated local health remain necessary for they are easier to survey, they lead to success faster, and they show important effective process elements.

The guideline covers almost everything that has to do with local public health. This comprehensiveness forces municipalities and RHS's to make choices for specific health problems and for the appropriate instruments to address these problems. When, as a consequence of decentralization of government tasks, local authorities have to deal with an increasing problem-ownership, we may also have to grant the local community a major part of solution-ownership. The process of contribution to solving a problem, where local parties themselves come up with possible solutions, appears to be a motivating factor for positive change that is generally underestimated. A consequence for the guideline is that its implementation (regardless of its effectiveness) should give room to moulding its directives in a way that they fit into specific local circumstances. From this point on, contextualization seems to be imposing itself as a new absolute movement. Within the implementation of substantiated knowledge, however, reinventing the wheel does not mean that previously invented methods are no longer adequate or are outdated. For RHS's, the challenge lies in offering the best available knowledge, without imposing it, and continuing to engage in the processes that stakeholders need to come to collaboration and change independently.

6.6 Recent developments

Agile methods and product-oriented methodologies; guideline development

In 2021, the Dutch legislation will undergo a change in the management of the environment with the so called 'Environment Act'. The law enforces better coordination in the area of the natural environment, social environment, infrastructure and health by bringing together former independent laws. Municipalities are preparing for cross-sectoral planning. Some municipalities experiment with the 'task-driven method'. This method focuses on desired products, raising of resources, and concrete division of tasks to support cooperation between municipal policy domains. The method is linked to the emergence of 'agile' methods and result-oriented strategies. Available guideline tools support these new methods. [31,32]

From an overall (theoretical) policy perspective, mutual coherence and interdependence of municipal sectors can easily be made comprehensible. However, this interdependence is not sufficiently found in policy practice as a necessary element for effective integrated policy. Leadership with focus on content (problem solving), and perhaps secondary on collaboration between policy domains, could be used more forcefully in order to find effective methods for collaboration. Using task-driven methods in municipalities seems an innovative choice that recognizes and seeks to address this problem. The amount of literature on agile working (Scrum; Lean methods; Exponential organizations: acceleration of information flows and use) is growing and major changes are expected from these working methods within knowledge organizations. [33,34]

Integrated policy can be defined as 'the expressed intent of government to allocate resources and capacities across relevant actors to resolve an expressly identified (health) issue within a certain timeframe'. (de Leeuw, et al. 2014, p.28.) [19] With regard to integrated health

policy, there is increasing awareness that ambitions on levels of governance, management, leadership and execution can be joined on a learning and incremental basis. (National Prevention Program 2014-2016; Alles is Gezondheid, p.7: 'Everyone emphasizes the importance of a broad, integrated approach to prevention, close to people's living environment and experiences. More focus, coherence and less non-commitment are required to achieve new successes'.) [35] Within the scope of this implementation study, the so called 'scale-up strategies' seem important to achieve structural embedment of prevention, for they target motivation, capability and opportunity, leadership, resources and infrastructure at the individual level (people and institutions), and at the level of interactive collaboration and common goal setting between regional and local public health parties (Leeman, et al. 2017). [36]

Insights like this have led to recent updates and instrumental developments in the guideline itself, such as the 'Toolkit Prevention in the District' ('Toolkit Preventie in de Wijk', RIVM, 2018) which offers tools for reducing health arrears by developing and implementing local health policy together with residents. With this instrument, municipalities are provided with suggestions to get a better grip on possibilities for health promotion, for instance by distinguishing different neighborhood types. [37] An affiliated national knowledge institute (Pharos) provided a new checklist for improved dialogue between district parties, taking into account different levels of literacy in addressing health issues. [38]

Since the guideline's distribution, developers have continuously involved users (health professionals, -organizations, knowledge institutes and municipalities) to improve its usability. Still, a frequently asked question from public health practice is how to achieve effective collaboration in developing integrated health. Therefore, current (and ongoing) actualization of the guideline focuses on providing roadmaps, tools and practical examples for tailoring integrated health processes to local conditions. At the same time, guideline developers are more often asked to make local contributions on the spot, for example to provide specific arguments for integrated policy with local parties.

In the years 2015 to 2017, guideline developers have seen an increase of (average number of unique) website visitors per month (pm): in 2015: 3900 pm, in 2016: 5260 pm, and in 2017: 6,920 pm. (RIVM, CGL, 2018).

6.7 Implications for practice and policy

6.7.1 Shared ambition within RHS's for integrated health policy

The importance of achieving shared ambitions applies both within the internal RHS organization, and in forming coalitions between potentially collaborating public health partners. This creation of common ground, however, is also a precondition at the level of local and regional coordination and governance. This study was limited to finding an implementation strategy for effective guidance in local health policy support by RHS. Coordination between RHS management, team leaders and professional policy executives can be supported by enhanced communication at the same levels of coordination and governance outside the RHS organization. As mentioned, building blocks for alignment and agreement, leadership and coaching are also applicable to achieving shared vision on a larger scale.

Incentives from local and regional governance, for example through task-driven methods, can be motivators to use specific tools (concept mapping, dialogue methods) to this end. These methods can provide insight in local and regional priorities, which can contribute to sustainable involvement of people at all desired (social and institutional) levels, on the condition that found priorities are taken seriously. [39,40]

6.7.2 Scanning opportunities of change

The complexity of the area in which local integrated public health policy making takes place, demands a clear systematic approach for professionalization of the sector.

The implementation strategy is more effective for RHS's when it is applied at different levels of change within the RHS organization, depending on the desired levels of adaptation of goals and working methods (professionalization) for advice on municipal health policy. The levels can be determined with an organization scan on ambitions regarding integrated health in management, professionals and municipalities. Subsequently, building blocks from the strategy (uptake, knowledge acquisition; alignment; setting goals and supervision; assurance) can be used where they are needed. The building blocks can also be applied in a variable sequence, depending on interventions emphasizing adoption or implementation. The same scan is required externally in order to determine the ambitions within the context of the municipal policy and partner organizations. A practical consequence for the implementation strategy is that a scan would have to precede the choice of specific activities (building blocks). Examples of such scans preceding implementation programs are available. [41]

6.7.3 Effective leadership in a local context

The outcomes of the concept maps of perspectives on successful implementation as seen by RHS's and manual developers seem to indicate that for effective integral health policy, it is better to start from the perspectives of other (than health-) policy domains in order to 'avoid the pitfall of exclusive thinking from health themes'. [19, p. 343] From this point of view, the emphasis by developers on the health issues in municipal policy may be labeled as a mistake. Still, the afore mentioned 'task-driven method' stimulates the focus on achieving results in a clearly defined area. Following De Leeuw (et al.), intersectoral policy is 'the expressed intent of government to allocate resources and capacities across relevant actors to resolve an expressly identified (health) issue within a certain timeframe'. [42] Leadership, in this sense, means at governance level: that capacity with clear assignments from various sectors is in accordance and brought together; at municipal level: that aldermen and policy officers are informed and ready to set matching local ambitions; and at RHS level: that management, team leaders and policy executives build the internal professional capacity to advice and support their municipalities adequately in accordance with these ambitions. [43] This focus requires specific competences from health professionals (RHS), including effective leadership in a local context. The National Competence Profile for Health Promotion and Prevention offers a cross-level overview of necessary skills and competences for this professionalization, which concerns RHS organizations as a whole. [30]

6.8 Future research

6.8.1 Guideline use within the internal RHS's policy process

Since 2014, commissioned by the Ministry, the developers (RIVM) are continuously updating the guideline by including new evidence-based and practice-based knowledge in the online instrument in addition to practical examples. With this further development, in collaboration with the practice, municipalities and knowledge institutes, the practicability of the guideline may improve by investigating its most essential characteristics for effective use within the RHS policy process (e.g. through concept mapping). As long as the procedural clarity on how to apply essential guidelines' instruments is lacking, implementation will not succeed. The functionality of preceding organizational scans that can detect the opportunities and obstacles to implementation should be investigated more extensively for the specific field of integrated public health policy.

6.8.2 New balance in applying evidence and 'reinventing the wheel'

With regard to finding a new balance between the use of reliable knowledge developed by researchers, and the significance of the local processes where the need is felt to 'reinvent the wheel', further research is indicated on the qualitative relationship between governance (management) and participation, or strengthening the bridge between administrative and social processes. Ethical aspects of building common ground and achieving trustworthiness between different levels of participation also play an important role when evidence is to be adopted in practice. Recent Swedish research, dealing with the dilemma of balance between rigor and pragmatism (inviting stakeholders to negotiate criteria and adapt guidelines accordingly), states this problem as follows: 'if the common dilemmas faced by guideline developers are not addressed, the use of guideline development models will not reach its full potential. In order to understand and improve guideline development processes further studies of decision making with a similar focus may provide guidance.' [39]

6.8.3 Guideline implementation in local health policy and learning from clinical guideline implementation

The domains of clinical guideline implementation and guidelines for public health policy are different, but not opposed to each other. In comparison with research on guideline implementation in public health, there is a much larger body of scientific literature on clinical guideline implementation. In this thesis we described some essential differences between the two fields of research. A number of characteristics for guideline implementation from the clinical setting, however, may well be suitable for the improvement of integrated health policy and the implementation of specific procedures. The comparison seems valid for the role of leadership in a multi disciplinary and complex environment, where effective intervention depends on clear communication, agreement on definition (or focus) of the problem, agreement on urgency to address the problem, the necessity of combining specialized knowledge at different levels, reliability on own - and colleagues' skills, a certain amount of guts, and a strong motivation or drive to tackle a substantial threat. [44] The leading capacity (competencies) plays a crucial role in clinical teams, when effective collaboration to treat a patient successfully is at stake. This may also apply to public health governance (management) policy (health policy, youth care, infectious disease control, health promotion) - and internal leadership and implementation (action level). Further research is needed in how RHS's can contribute to the 'toolbox of government'.

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Summary

Summary

Figures from research (RIVM) regarding lifestyle of the Dutch population show that 25-28% of the adults smoke, that 48% are overweight and lack physical exercise, and that 10% drink excessively. These aspects of an unhealthy lifestyle play an important role in the development of cardiovascular diseases, diabetes, strokes, lung diseases (COPD), lung cancer, mood disorders and back - and neck complaints. The contribution of unhealthy lifestyles to the total burden of disease and death in the Netherlands is estimated at 13%.

Based on this knowledge, from 2006 onwards, the Ministry of Health, Welfare and Sport (VWS) determined five main subjects for improving public health in the Netherlands and decided to nationally respond to the increase of obesity, diabetes, depression, smoking and harmful alcohol use. Later, the subjects 'unhealthy sexual behavior', 'sport and exercise', and 'prevention of injury' were added.

Every four years, the Ministry of Health (VWS), offers guidance to the national and municipal public health policy through a national policy memorandum including the most urgent subjects for prevention. Based on policy evaluations from previous years, emphasis or priorities within the long-term health policy may shift. Since 2010, the government has placed greater emphasis on the effectiveness of the municipal health policy. More attention is needed for vulnerable groups in society and municipalities are encouraged to use an integrated approach to public health. Integrated health policy means that different policy areas (e.g. welfare, public health, the environment, spatial planning, social affairs) contribute to 'health'. Conversely, health aspects can be linked to municipal priorities such as improving the participation of citizens and improving political and administrative support.

To support municipalities in the development of an integrated approach, national health and research institutes, in interaction with public health practice, have been developing national guidelines with recommended interventions for health promotion and prevention of smoking, obesity, alcohol and depression (also for diabetes, however diabetes prevention already had a longer history).

Research by the RIVM, commissioned by the Health Inspectorate and the Ministry of Health (2010), concluded that the use of these guidelines was not obvious to the intended users of municipalities and regional health services (RHS's). This led to the question how the use could be improved in practice. The separate guidelines for the different lifestyle aspects were then brought together in one national Healthy Community Guideline (2010), which was supplemented with support tools for (the implementation of) integrated health policy development for municipalities. This guideline is a tool for improving integrated local health and is written for policy makers of municipalities, RHS's and other professionals. It supports them with information, advice and best practices in creating, implementing and evaluating integrated health policies and community-based health promotion.

The aim of this study is to gain insight into the 'black box' of factors and processes that influence the implementation of the Healthy Community Guideline (hereafter: 'guideline') in the RHS practice. Subsequently, these factors and processes were translated into building blocks for an implementation strategy for the guideline, aimed at the RHS as knowledge supplier and municipal advisor for integrated health policy.

Chapter 1 (Introduction) describes the general system of the Dutch public health and relevant agencies for the development of national - and local public health. This is followed by information about the guideline and the theoretical framework with some central prin-

ciples the implementation research was based on. Then the goal of the study, the central research question and the research questions for the various components are described. The chapter finalizes with a short overview of the entire study.

Chapter 2 examines which factors in the policy - and executive practice of the RHS hinder or encourage the acceptance and use of the guideline. A framework, derived from theories on – and empirical research into – the dissemination of innovations was used. (Measurement Instrument for Determinants of Innovations - MIDI) With additional insights from policy and management theories, five categories of barriers and facilitators were identified: the organization, the individual user, the management, the innovation (guideline) and the social political environment. The MIDI framework served as a basis for conducting interviews with RHS professionals, RHS managers, municipal policy officers and public health experts (scientists and trainers/consultants) outside the RHS organization. The results show that the benefits of guideline use for RHS's (professionals, managers), municipalities and within the socio-political environment of their partners, are still insufficiently illustrated, because of poor knowledge of the guideline and the lack of a shared ambition between management, professionals and municipalities regarding integrated health policy. At the same time, the guideline itself, because of its completeness and vision, is positively assessed by RHS practice. However, a translation of the guideline into concrete use for the local (municipal) context is still insufficiently successful within the RHS. Formulating a collective ambition (from RHS management, professionals and municipalities) through clear goals for integrated health policy can facilitate this translation. Insofar as new methods and competences are requested for this translation, more direct communication between management and professionals and support for coaching and supervision within the RHS organization seem important.

Chapter 3 describes the results of an online survey among all (28) Dutch RHS's to identify the most important determinants for guideline use by RHS professionals (municipal policy advisers and health advocates). Two questions were central to this part of the research:

1. To what extent do RHS professionals use the guideline?
2. Which determinants are associated with the implementation of the guideline within the RHS organization?

The MIDI framework was used as a starting point for the preparation of a research framework for the questionnaire. The most important outcome measures were 'use' (whether or not) of the guideline and 'completeness of use' (use of max. 5 health themes and 5 checklists), related to specific components of the guideline for policy advice by RHS professionals to municipalities.

Possible associations between determinants of the research framework (at the levels of the organization and professional) and (the degree of) 'use' of the guidelines were examined using multivariate regression models. All RHS's were represented in the results. The results showed that 48% of the respondents used the guide. The factors 'knowledge' (of the guideline), 'perceived task responsibility' and 'procedural clarity' (usability) were significantly related to the general use of the guideline. The 'practical usability' factor was the only significant factor in the multivariate analysis. The factor 'self-efficacy' (confidence in one's own competences) accounted for significant differences in the use of the number of components of the guideline (completeness of use).

From these results it was concluded that an implementation strategy for the guideline

should be aimed at disseminating knowledge and improving the procedural clarity of the guideline for intended users. Consensus on task responsibility and ambitions for integrated policy between RHS management and professionals seems to support the achievement of procedural clarity. Strengthening the self-efficacy of professionals could also contribute to the completeness of use.

Chapter 4 addresses the question of the characteristics of successful implementation of the guideline in accordance with RHS professionals and developers of the instrument, and the possible similarities and differences in perspectives between these groups. The aim of this part of the study was to tailor the basis of the implementation strategy applied by 2 pilot RHS's to each RHS organization separately. To reveal the characteristics of successful implementation, the 'concept mapping' method was used. This method shows all perspectives of participants regarding a specific theme in a visualized 'map' by means of substantive structuring and weighing (valuation) of viewpoints, which helps prioritizing different steps in a change process, in this case the implementation of the guideline.

The separate concept maps in the 2 pilot RHS's and with the developers of the guideline yielded different outcomes. The pilot RHS's made other choices for involving the participants in their concept map. RHS 1 considered it important to involve partner organizations and municipalities in the realization of the concept map, while RHS 2 included only internal staff.

Concerning differences in outcomes, guideline developers found the implementation successful when the various health themes were recognized in the local health policy memorandum and in the executive health promotion practice. The two pilot RHS's agreed that the characteristics for successful implementation should be apparent from all public health partners' commitment to collaborate with one another, and from the practical applicability of the comprehensive guideline. However, RHS 1 emphasized guideline use by RHS professionals, while RHS 2 placed the main responsibility for the use of the guideline with the municipalities. The results of the various concept maps gave the pilot RHS's starting points for developing their own implementation strategy for the guidelines, such as attention to alignment of goals – and stepping up communication – on integrated policy between RHS and municipalities.

In chapter 5, the pilot implementations are described in the two pilot RHS's as they were carried out according to a first version of the implementation strategy. The most important question for the evaluation of this implementation strategy was whether (and which of) the building blocks of the implementation strategy were feasible and to what extent they would improve the implementation of the guideline for integrated health policy in the work of the RHS's.

The progress and results of the implementation strategy in the RHS pilots were compared qualitatively with the "care as usual" for integrated health policy in two control RHS's. In the pilot RHS's, the evaluation model of Nutbeam was used to structure the evaluation of the pilot implementation. This model describes four phases: 1. The program integrity: is the implementation carried out as planned? 2. The program reach: to what extent are the intended guideline users reached? 3. Program acceptance: to what extent is the program accepted? 4. Change: which observations indicate changed working methods? The comparison with the two control RHS's was made through semi-structured group interviews with professionals from these RHS's.

The evaluation showed that both pilot RHS's had largely implemented the implementation strategy as planned. Furthermore, it turned out that the purpose of the guideline for RHS health advice on integrated health policy was not discussed with policy makers and management at all desired levels. An increased use of the guideline was mainly seen among health promoters.

In the control RHS's, we found methods for promoting integrated health policy that showed similarities with two building blocks from the concept/first version of the implementation strategy: the alignment of ambitions and concrete goals between management and executive RHS disciplines (policy makers and health promoters), and the support of professionals by means of cooperative team leadership including coaching and supervision.

Conclusions

In chapter 6 the results of this study are critically reviewed, and it is concluded that an effective implementation of the guideline within the RHS organization can be strengthened by paying specific attention to two building blocks:

The first building block concerns communication, agreement and coordination at all necessary levels (multidisciplinary) about specific local urgencies and ambitions for integrated health policy. Health themes from the guideline are still the greatest threats to public health nationally and locally. This means that RHS managers, team leaders and professionals must maintain short communication channels between each other and their municipal relations, with a focus on an integrated approach to the most urgent health problems.

The second building block relates to the translation of the RHS (in coordination with municipalities) expressed ambitions into team goals, coaching and leadership, in which the RHS organization plays a supportive role by providing sufficient capacity and creating conditions for the development of professional competences.

These building blocks came forward in the evaluation of the pilot implementation as relevant for a more effective implementation strategy for the guideline.

In addition, it became clear that because of the diversity in domains and organizations involved in integrated health policy, the implementation of the Healthy Community Guideline requires that the organizations involved make their goals explicit. This facilitates the selection of the available components of the guideline in practice. Furthermore, flexible handling of the guideline is required to improve its implementability for the local context. Finding balance between aligning with the local context and the use of proven effective and recommended interventions (evidence from the guideline) remains an important competence for the RHS in the policy advice to municipalities and other stakeholders in public health.

The guideline covers almost everything that has to do with local health policy. This completeness forces municipalities and RHS's to make choices in the specific health themes and in the range of suitable instruments offered by the guideline. The process in which local parties are involved at an early stage in the possible solution to perceived problems in their immediate environment, does not yet seem to receive sufficient attention. This direct involvement of communities and neighborhoods and the search for 'own solutions' is a

prerequisite for participation and sufficient support for change. For the sake of an effective connection with citizens and drawing attention to lifestyle theme's, it may therefore be necessary to prioritize local targets that are outside direct public health.

Coordination (and control) between RHS management, team leaders and professionals in policy advice and practice can be supported by strengthening the communication on the same levels of coordination (operational, tactical and strategic) outside the RHS organization. The building blocks of alignment and agreement, effective leadership and coaching are also applicable on a broader scale to improve collaboration and understanding between municipalities and other parties to reach a shared vision on priorities for integrated health.

In a complex public health environment consisting of many domains and sectors, effective leadership appears to be a crucial factor. Therefore, at the administrative level, the capacity from various policy sectors should be brought together with a clear assignment. Subsequently, at municipal level, aldermen and policy officials should be informed and be prepared to adjust their local ambitions for integrated policy. Finally, RHS management, team leaders, policy officers and health promoters should be enabled to develop the professional capacity to adequately advise and support their municipalities in these ambitions.

Further research could focus on finding methods in which RHS's can contribute to the continued development of the found building blocks for an implementation strategy for the guideline.

The use of concept mapping seems promising for tailoring purposes when application of health research (scientific knowledge) and local needs come together. Here we must ask to what extent compromises can be made between scientific rigor and pragmatism and where this leads to ethical problems. This question seems justified in the current trend in which 'self-direction' of citizens and communities is frequently emphasized, while expectations rise regarding scientific solutions for public health issues.

The building blocks can increase their effect by using them at the appropriate levels within the RHS organization. Research into the applicability of an organization scan to identify levels of connection and willingness to change could determine whether such a scan supports the implementation process. In addition, tools for 'leadership and governance' in integrated local health policy may also be an important component for further exploration.

Nederlandse samenvatting

Nederlandse samenvatting | Dutch summary

Uit cijfers van onderzoek (RIVM) naar leefstijl van de Nederlandse bevolking blijkt dat 25-28% van de volwassenen rookt, dat 48% kampt met overgewicht en onvoldoende beweegt en dat 10% overmatig drinkt. Deze aspecten van een ongezonde leefstijl spelen een belangrijke rol bij het ontstaan van hart- en vaatziekten, diabetes, beroertes, longaandoeningen (COPD), longkanker, stemmingsstoornissen en rug- en nekklachten. De bijdrage van ongezonde leefstijl aan het totaal van ziektelast en overlijden wordt geschat op 13%.

Mede op basis van deze kennis heeft het ministerie van Volksgezondheid, Welzijn en Sport (VWS) vanaf 2006 de belangrijkste thema's bepaald voor verbetering van de publieke gezondheid in Nederland en besloten landelijk de strijd aan te gaan tegen overgewicht, diabetes, depressie, roken en schadelijk alcoholgebruik. Later zijn hier de thema's seksuele (on)gezondheid, sport en bewegen en valpreventie aan toegevoegd.

Via een landelijke nota met de meest urgente thema's voor preventie, geeft het ministerie van VWS elke vier jaar richting aan het landelijke en gemeentelijke publieke gezondheidsbeleid. Op basis van beleidsevaluaties van de voorgaande jaren kunnen accenten binnen het lange termijn gezondheidsbeleid verschuiven. Vanaf 2010 legt de overheid sterker de nadruk op de effectiviteit van het gemeentelijk gezondheidsbeleid, waarbij meer aandacht voor kwetsbare groepen in de samenleving wordt gevraagd en waarin gemeenten gestimuleerd worden een integrale aanpak voor publieke gezondheid te hanteren. Integraal gezondheidsbeleid betekent dat verschillende beleidsdomeinen (o.a. welzijn, volksgezondheid, milieu, ruimtelijke ordening, sociale zaken) bijdragen aan 'gezondheid'. Omgekeerd kunnen gezondheidsaspecten aansluiten bij de gemeentelijke prioriteiten zoals het verbeteren van de participatie van burgers en het verbeteren van politiek en bestuurlijk draagvlak.

Om gemeenten in de ontwikkeling van een integrale aanpak te ondersteunen, zijn in opdracht van VWS door landelijke gezondheids- en onderzoeksinstituten en in wisselwerking met de praktijk vanaf 2006 landelijke handleidingen met aanbevolen interventies ontwikkeld voor gezondheidsbevordering en preventie van roken, overgewicht, alcohol en depressie.

Onderzoek door het RIVM in opdracht van de Inspectie voor de Gezondheidszorg en het ministerie van VWS (2010), concludeerde echter dat het gebruik van deze handleidingen niet vanzelfsprekend was voor de beoogde gebruikers van gemeenten en GGD-en. Hierop volgde de vraag hoe het gebruik verbeterd zou kunnen worden in de praktijk. De afzonderlijke handleidingen voor de leefstijlthema's zijn vervolgens in de landelijke Handreiking Gezonde Gemeente (2010) samengebracht en aangevuld met ondersteuningsinstrumenten voor het proces van integrale beleidsontwikkeling voor gemeenten. Deze handreiking is een instrument voor verbetering van integraal gemeentelijk gezondheidsbeleid en is geschreven voor beleidsmedewerkers van gemeenten, GGD-en en andere professionals om hen met informatie, adviezen en praktijkvoorbeelden te ondersteunen bij het maken, uitvoeren en evalueren van gezondheidsbeleid en wijkgerichte gezondheidsbevordering.

Het doel van deze studie is om inzicht te verkrijgen in de 'black box' van factoren en processen die van invloed zijn op de implementatie van de Handreiking Gezonde Gemeente (hierna: handreiking) in de GGD-praktijk. Vervolgens zijn deze factoren en processen vertaald in bouwstenen voor een effectieve implementatiestrategie voor de handreiking, gericht op de GGD als kennisleverancier en gemeentelijk adviseur voor integraal gezondheidsbeleid.

Hoofdstuk 1 (Introductie) beschrijft de algemene kaders de Nederlandse publieke gezondheid en de betrokken instanties voor ontwikkeling van het landelijke en lokale publieke gezondheidsbeleid. Daarop volgt informatie over de handreiking en het theoretisch kader met enkele centrale uitgangspunten van waaruit het implementatieonderzoek is uitgevoerd. Vervolgens worden het doel van de studie, de centrale vraagstelling, de onderzoeksvragen voor de diverse onderdelen beschreven en wordt een kort overzicht van de gehele studie gepresenteerd.

In hoofdstuk 2 wordt nagegaan welke factoren in de beleids- en uitvoeringspraktijk van de GGD de acceptatie en het gebruik van de handreiking belemmeren of bevorderen. Er is gebruik gemaakt van een raamwerk, ontleend aan empirisch onderzoek naar – en theorieën over – de verspreiding van innovaties. (Measurement Instrument for Determinants of Innovations – MIDI). Dit raamwerk werd aangevuld met inzichten uit beleids- en managementtheorieën. Hiermee werden vijf categorieën voor belemmerende en bevorderende factoren benoemd: de organisatie, de individuele gebruiker, het management, de innovatie (handreiking) en de sociaal politieke omgeving. Het raamwerk diende als basis voor de afname van interviews met GGD-professionals, GGD-managers, gemeentelijke beleidsmedewerkers en Public health experts (wetenschappers en opleiders/consultants) buiten de GGD-organisatie. De resultaten laten zien dat de voordelen van het gebruik van de handreiking voor GGD-en (professionals, managers), gemeenten en binnen de sociaal-politieke omgeving van hun samenwerkingspartners nog onvoldoende in beeld zijn gebracht, als gevolg van ontoereikende kennis over de handreiking en het ontbreken van een gedeelde ambitie tussen management, professionals en gemeenten ten aanzien van integraal gezondheidsbeleid. Tegelijkertijd wordt de innovatie, de handreiking zelf, vanwege haar compleetheid en visie door de praktijk positief beoordeeld. Een concrete vertaling van de handreiking naar het gebruik in de lokale (gemeentelijke) context lukt echter nog onvoldoende binnen de GGD. Het formuleren van een collectieve ambitie (vanuit GGD-management, professionals en gemeenten) door middel van heldere doelen voor integraal gezondheidsbeleid kan deze vertaling vergemakkelijken. Voor zover hierbij nieuwe werkwijzen en competenties worden gevraagd, lijken een meer directe communicatie tussen management en professionals en ondersteuning voor coaching en intervisie binnen de GGD-organisatie van belang.

In hoofdstuk 3 worden de resultaten beschreven van een online survey onder alle Nederlandse GGD-en naar de belangrijkste determinanten voor het gebruik van de handreiking door GGD-professionals (gemeentelijke beleidsadviseurs en gezondheidsbevorderaars). Twee vragen stonden voor dit deel van het onderzoek centraal:

1. In hoeverre gebruiken GGD-professionals de handreiking?
2. Welke determinanten hangen samen met de implementatie van de handreiking binnen de GGD-organisatie?

Het MIDI-raamwerk, gebaseerd op theoretisch en empirisch onderzoek naar determinanten voor innovaties in de publieke gezondheid, werd gebruikt als uitgangspunt voor het opstellen van een onderzoekskader voor de vragenlijst. De belangrijkste uitkomstmaten waren 'gebruik' (wel of niet) van de handreiking en 'mate van gebruik' (5 gezondheidsthema's en 5 checklists), gerelateerd aan specifieke onderdelen van de handreiking voor beleidsadvisering door GGD-professionals aan gemeenten.

Mogelijke associaties tussen determinanten uit het onderzoekskader (op de niveaus

van de organisatie en de professional) en (de mate van) 'gebruik' van de handreiking werden onderzocht via multivariate regressie modellen.

In de uitkomsten waren alle GGD-en vertegenwoordigd. De resultaten lieten zien dat 48% van de respondenten de handreiking gebruikten. De factoren 'kennis' (van de handreiking), 'taakopvatting' en 'procedurele helderheid' waren significant gerelateerd aan het algemeen gebruik van de handreiking. De factor 'praktische bruikbaarheid' bleef in de multivariate analyse als enige significant. De factor 'self-efficacy' (vertrouwen in eigen competentie) was verantwoordelijk voor significante verschillen in gebruik van het aantal onderdelen van de handreiking (mate van gebruik).

Hieruit is geconcludeerd dat een implementatiestrategie voor de handreiking gericht zou moeten worden op verspreiden van kennis en verbeteren van de procedurele helderheid van de handreiking voor beoogde gebruikers. Consensus over taakopvatting en ambities voor integraal beleid tussen GGD-management en GGD-professionals lijkt ondersteunend voor het bereiken van procedurele helderheid. Het versterken van de self-efficacy van professionals zou daarnaast kunnen bijdragen aan de mate van gebruik.

In Hoofstuk 4 wordt de vraag behandeld naar de kenmerken van succesvolle implementatie van de handreiking volgens GGD-professionals en de ontwikkelaars van het instrument, en de mogelijke overeenkomsten en verschillen in perspectieven tussen deze groepen.

Het doel van dit onderdeel van de studie was om de basis van de implementatiestrategie die door 2 pilot GGD-en werd toegepast verder op maat te maken voor elke GGD-organisatie afzonderlijk. Voor het achterhalen van de kenmerken van succesvolle implementatie is gebruik gemaakt van 'concept mapping'. Deze methode brengt alle standpunten van deelnemers in beeld over een specifiek thema, waarbij door middel van inhoudelijke structurering en weging (waardering) van standpunten een overzichtelijke 'map' wordt opgesteld voor prioritering van verschillende stappen in een veranderingsproces, in dit geval de implementatie van de handreiking. In zowel de 2 pilot GGD-en als bij de ontwikkelaars van de handreiking leverden de afzonderlijke concept maps verschillende uitkomsten op en maakten de pilot GGD-en andere keuzen voor het betrekken van de deelnemers bij deze conceptmap. GGD 1 vond het van belang om partner organisaties en gemeenten te betrekken bij de totstandkoming van de concept map, terwijl GGD 2 alleen interne medewerkers includeerde. Wat verschillen in uitkomsten betreft, vonden de ontwikkelaars van de handreiking de implementatie geslaagd wanneer de diverse gezondheidsthema's in de gemeentelijk nota's voor gezondheidsbeleid en in de uitvoeringspraktijk herkenbaar aanwezig waren. Volgens de beide pilot GGD-en zou succesvolle implementatie vooral moeten blijken uit het commitment bij de public health organisaties (externe partners) om samenwerking met elkaar aan te gaan, en uit de praktische bruikbaarheid van de handreiking voor integraal gezondheidsbeleid. GGD 1 legde de nadruk op het gebruik van de handreiking door de eigen professionals, terwijl GGD 2 het gebruik door gemeenten als kenmerk voor geslaagde implementatie vooropstelde. De uitkomsten van de verschillende concept maps gaven voor de pilot GGD-en aanknopingspunten voor de uitwerking van hun eigen implementatiestrategie voor de handreiking, zoals aandacht voor onderlinge afstemming van doelen voor – en intensivering van communicatie over – integraal beleid tussen GGD en gemeenten.

In hoofdstuk 5 worden de proefimplementaties beschreven in twee pilot GGD-en zoals die volgens een eerste versie van de een implementatiestrategie zijn uitgevoerd. De belang-

rijkste vraag voor de evaluatie van deze implementatiestrategie was of (en welke van) de bouwstenen uit de implementatiestrategie uitvoerbaar waren en in hoeverre zij de implementatie van de handreiking voor integraal gezondheidsbeleid in de werkprocessen van de GGD zouden verbeteren.

Het verloop en de resultaten van de eerste versie van de implementatiestrategie in de pilot GGD-en werden kwalitatief vergeleken met de gebruikelijke werkwijze voor integraal gezondheidsbeleid in twee controle GGD-en. In de pilot GGD-en is gebruik gemaakt van het Nutbeam model dat vier fasen van evaluatie beschrijft: 1. De programma integriteit: verloopt de implementatie zoals gepland? 2. Het bereik van het programma: in hoeverre worden beoogde disciplines bereikt? 3. Programma acceptatie: in hoeverre wordt het programma aanvaard? 4. Feitelijke verandering: welke observaties wijzen op een veranderde werkwijze? De vergelijking met de twee controle GGD-en werd gemaakt via semigestructureerde groepsinterviews.

Het onderzoek liet zien dat beide pilot GGD-en de implementatiestrategie grotendeels hebben toegepast zoals gepland. Verder bleek dat de functie van de handreiking voor de GGD-gezondheidsadvisering op integraal gezondheidsbeleid niet op alle gewenste niveaus van beleidsfuncties en management werd besproken. Een toename van het gebruik van de handreiking werd vooral bij gezondheidsbevorderaars gezien.

In de controle GGD-en werden werkwijzen voor het bevorderen van integraal gezondheidsbeleid gevonden die overeenkomsten vertoonden met twee bouwstenen uit de ontwerp implementatiestrategie: de afstemming van ambities en concrete doelen tussen management en uitvoerende GGD-disciplines, en de ondersteuning van professionals door middel van meewerkend teamleiderschap waarbij coaching en intervisie werden gebruikt.

Conclusies

In hoofdstuk 6 worden de resultaten van deze studie kritisch tegen het licht gehouden en wordt geconcludeerd dat een effectieve implementatie van de handreiking binnen de GGD-organisatie kan worden versterkt door twee bouwstenen:

De eerste bouwsteen betreft communicatie, overeenstemming en afstemming op alle noodzakelijke niveaus (multidisciplinair) over specifieke lokale urgenties en ambities voor integraal gezondheidsbeleid; De gezondheidsthema's uit de handreiking vormen landelijk en lokaal nog steeds de grootste bedreigingen voor de volksgezondheid. Dit betekent dat GGD-managers, -teamleiders en -professionals onderling en met hun gemeentelijke relaties korte communicatielijnen moeten onderhouden met een focus op een integrale benadering van de meest urgente gezondheidsproblemen.

De tweede bouwsteen betreft de vertaling van door de GGD (in afstemming met gemeenten) uitgesproken ambities in teamdoelen, coaching en leiderschap, waarbij de GGD-organisatie een ondersteunende rol vervult door te voorzien in voldoende capaciteit en met het creëren van condities voor de ontwikkeling van professionele competenties.

Deze bouwstenen kwamen in de evaluatie van de pilotimplementatie naar voren als relevant voor de implementatiestrategie voor de handreiking.

Vanwege de diversiteit in domeinen en organisaties die betrokken zijn bij integraal gezondheidsbeleid, vereist de implementatie van de Handreiking Gezonde Gemeente dat de betrokken organisaties hun doelen expliciet maken. Hiermee wordt de keuze voor de

beschikbare deelinstrumenten van de handreiking voor de uitvoeringspraktijk gemakkelijker. Daarnaast is flexibiliteit in het omgaan met de handreiking vereist om de implementeerbaarheid voor de lokale context te verbeteren. Het vinden van evenwicht tussen aansluiting bij de lokale context en het gebruik van aangetoond effectieve of aanbevolen interventies (evidence uit de handreiking), blijft voor de GGD een belangrijke competentie in de beleidsadvisering aan gemeenten en stakeholders in de publieke gezondheid.

De handreiking behelst ongeveer alles wat te maken heeft met lokaal gezondheidsbeleid. Deze compleetheid dwingt gemeenten en GGD-en om keuzes te maken in de specifieke gezondheidsthema's en in het aanbod van de passende instrumenten en tools uit de handreiking. Het proces waarin lokale partijen in een vroeg stadium betrokken worden bij de mogelijke oplossing voor ervaren problemen in hun directe omgeving, lijkt hierin nog onvoldoende aandacht te krijgen. Deze directe betrokkenheid van leefgemeenschappen en wijken en het zoeken naar 'eigen oplossingen' is een voorwaarde voor participatie en voor voldoende draagvlak voor verandering. Omwille van een effectieve verbinding met de burger en aandacht voor leefstijlthema's, kan het daarom nodig zijn om voorrang te geven aan lokale doelen die buiten de directe volksgezondheid liggen.

De coördinatie (en sturing) tussen GGD-management, teamleiders en professionals in de beleidsadvisering en -uitvoering kan ondersteund worden door het versterken van de communicatie op dezelfde niveaus van coördinatie (operationeel, tactisch en strategisch) buiten de GGD-organisatie. De bouwstenen van afstemming en overeenstemming, effectief leiderschap en coaching zijn ook van toepassing op een bredere schaal tussen gemeenten en andere partijen om een gedeelde visie over prioriteiten voor integraal gezondheidsbeleid te bereiken.

In een complexe omgeving voor de volksgezondheid die uit vele domeinen en sectoren bestaat, lijkt effectief leiderschap een cruciale factor te zijn. Daarom moet op bestuurlijk niveau de capaciteit van verschillende beleidssectoren worden samengebracht met een duidelijke opdracht. Vervolgens moeten op gemeentelijk niveau wethouders en beleidsambtenaren worden geïnformeerd en bereid zijn om hun lokale ambities voor integraal beleid aan te passen. Ten slotte moeten GGD-management, teamleiders, beleidsmedewerkers en gezondheidsbevorderaars in staat worden gesteld om de professionele capaciteit te ontwikkelen om hun gemeenten adequaat te adviseren en te ondersteunen bij deze ambities.

Verder onderzoek zou zich kunnen richten op het vinden van methoden waarbij GGD-en kunnen bijdragen aan de doorontwikkeling van de gevonden bouwstenen voor een implementatiestrategie voor de handreiking.

Het gebruik van concept mapping lijkt veelbelovend voor tailoring-doeleinden, wanneer de toepassing van gezondheidsonderzoek (wetenschappelijke kennis) en lokale behoeften samen komen. Hier moeten we ons afvragen in hoeverre compromissen kunnen worden gesloten tussen wetenschappelijke striktheid en pragmatisme en waar dit tot ethische problemen leidt. Deze onderzoeksvraag lijkt gerechtvaardigd in de huidige trend waarin 'eigen regie' van burgers en gemeenschappen vaak wordt benadrukt, terwijl de verwachtingen met betrekking tot wetenschappelijke oplossingen voor publieke gezondheidsrisico's toenemen.

De genoemde bouwstenen kunnen hun effect vergroten door ze te gebruiken op de juiste niveaus binnen de GGD-organisatie. Onderzoek naar de toepasbaarheid van een organisatiescan om niveaus van overeenstemming en bereidheid tot verandering te bepalen, kan bepalen of een dergelijke scan het implementatieproces ondersteunt. Daarnaast

kunnen ‘tools voor leiderschap’ in integraal lokaal gezondheidsbeleid ook een belangrijk onderdeel zijn voor verdere verkenning.

Dankwoord

Dankwoord alleen in de gedrukte versie van dit proefschrift.

List of publications

Kuunders, T.J.M., Jacobs, M.A.M., Goor, L.A.M. van de, Bon-Martens, M.J.H. van, Oers, J.A.M. van, & Paulussen, T.G.W.M. (2017). Implementation of a guideline for local health policy making by Regional Health Services: exploring determinants of use by a web survey. *BMC Health Services Research*. 17, 562. doi:10.1186/s12913-017-2499-2.

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About the author

Theo Kuunders was born on the 29th of August 1959 in Gemert. After his nursery education in general- and mental healthcare, he worked as an outdoor mental health consultant for different health organizations in the South of the Netherlands. He obtained his Master of Arts degree in Philosophy at the Radboud University Nijmegen and graduated cum laude in 1998 with his thesis on the Buddhist concept of 'Śūnyatā' (emptiness) and its possible meaning for Western discursive thinking. After his graduation, he worked in social mental healthcare for elderly and combined this work with policy making and consultancy for ethical committees within health organizations at the Dutch Hospital Association (NVZ).

From 2005, he has worked as policy advisor for municipalities at the Regional Health Service GGD Hart voor Brabant and was also posted as science practitioner at the Tranzo Scientific Centre for Care and Welfare at Tilburg University. In 2011 he started his PhD research on guideline implementation in local public health policy. Currently, Theo works at GGD Hart voor Brabant as researcher for local public health advisory.